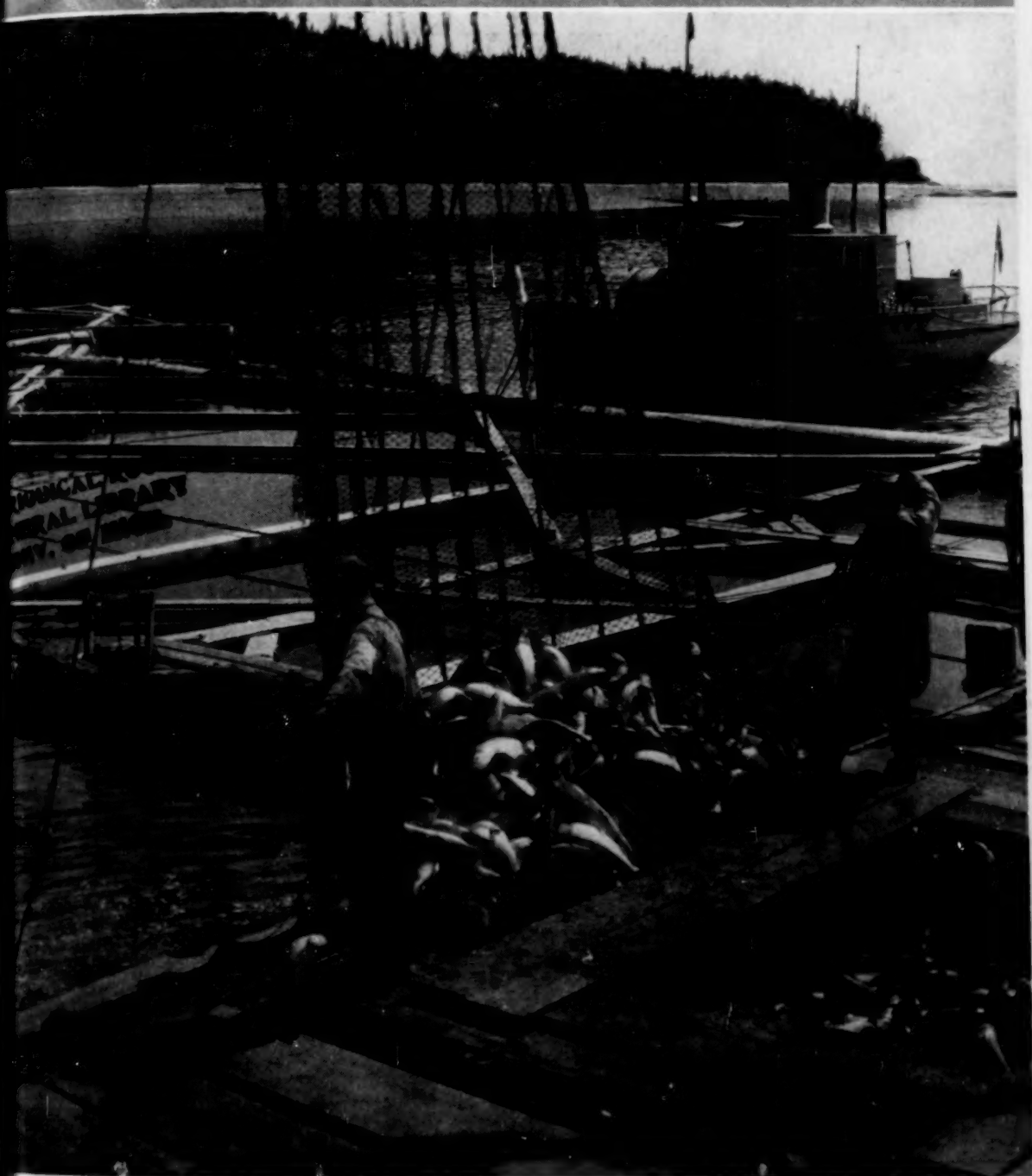


DEC 15 '41

# MONTHLY LABOR REVIEW

UNITED STATES DEPARTMENT OF LABOR • BUREAU OF LABOR STATISTICS



Taking salmon from floating trap, Alaska

Photo by courtesy of U. S. Bureau of Fisheries

*this issue . . .* American Commodity Markets after 2 Years of  
War • Wages and Cost of Living in two World  
MEMBER 1941 Wars • Wage Provisions in Union Agreements  
53 • No. 5

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## This Issue in Brief

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### *American Commodity Markets After 2 Years of War.*

The sharp rise in American commodity markets during the past year was particularly pronounced from the beginning of February 1941 to mid-September. The advance in the wholesale price level between August 1939 and September 1941 was not very far behind that which occurred in the same period in the first World War, and living costs at retail were up by about the same amount in the first 25 months of the present conflict as in the same interval in the years 1914-16. Although the extent of the increase in the first 2 years of war compares closely with that of 25 years ago, there are important differences in the markets most affected. Page 1071.

### *Wages and Cost of Living in Two World Wars.*

In the first 2 years of the World War, hourly earnings rose more rapidly and weekly earnings less rapidly than in the same period of the present war. In June 1916, weekly earnings in manufacturing industries were 15.1 percent higher than in June 1914. During the same period of the present war weekly earnings rose 31.8 percent, due in part to an increase in weekly hours from 37.3 per week in June 1939 to 41.3 in June 1941. The increases in hours and also in employment were mainly in high-wage industries, such as machine tools. Cost of living rose 8.9 percent from June 1914 to June 1916, and 6.1 percent in the corresponding later period. Workers had larger wage increases in manufacturing than in many other employments, but with important exceptions in both periods, wage earners could buy more

at the end of the first 2 years of war than at the beginning. Page 1103.

### *Wage Provisions in Union Agreements.*

The earliest written agreements between unions and employers were confined almost entirely to wage rates. Wage provisions in union agreements have expanded to include many items having a bearing on the protection and improvement of living standards. In addition to craft or occupational minima, many agreements now contain provisions outlining in detail the methods of job classification and adjustment of wage levels, methods for changing piece rates and production standards, bonus payments, allowances, deductions, and other factors affecting workers' incomes. Page 1126.

### *Wage Scales in the Building Trades.*

Union wage rates in the building trades in 75 cities increased 3.7 percent between June 1940 and June 1941. The rises were 3.5 percent for journeymen and 4.8 percent for helpers and laborers. Average union rates of pay for all building trades amounted to \$1.365 per hour this June—\$1.500 for journeymen and \$0.868 for helpers and laborers. Over 43 percent of the journeymen and approximately 50 percent of the helpers and laborers received raises in pay during the year. Average wages in June were 13 percent higher than in 1929—12 percent higher for journeymen and 20 percent higher for helpers and laborers. Page 1242.

### *Utilization of Plant Facilities.*

The tempo of defense production has recently been raised sharply through the extension of multiple-shift operations and increased use of overtime. This development toward

fuller utilization of plant facilities began in the last 6 months of 1940. The forces working on the second and third shifts were increased by 46 percent and 67 percent, respectively, during the period December 1940 to June 1941. As of December, 30 of the 299 plants were operating one shift a day, but in June only 13 of the plants were still on a single-shift basis. Page 1140.

*Earnings and Hours in Rice Mills.*

Average hourly earnings of workers in rice mills amounted to 36.0 cents during January and February 1941. California mills paid by far the highest wages—74.1 cents. This is more than double the average of workers in the three Southern States—32.5 cents. Four-fifths of the workers in the southern mills and 0.3 percent of those in California earned 30.0 cents an hour or less. Three-fourths of the

California workers and 0.9 percent of the southern workers earned 72.5 cents an hour or more. The average workweek was 37.2 hours. Weekly earnings averaged \$13.37. Page 1274.

*Housing of Federal Employees in Washington, D. C.*

A Bureau of Labor Statistics survey of rents in the Washington, D. C., area confirmed reports from other sources that the high level of rents in this area, rather than recent increases in rents, was the principal cause of complaint about the local housing situation. It showed that only about 7 percent of the Government workers occupying houses and apartments were paying less than \$30 per month and that 44 percent were paying \$50 or more. As a result, families with incomes under \$150 per month were devoting nearly one-third of their income to rent. Page 1224.



# MONTHLY LABOR REVIEW

FOR NOVEMBER 1941

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## AMERICAN COMMODITY MARKETS AFTER 2 YEARS OF WAR

By SAUL NELSON, *Bureau of Labor Statistics*

### *Summary*

THE rise in American commodity markets was sharply accentuated in the past year and particularly since February 1941. At wholesale, the general advance by the end of September was not very far behind that which occurred in the same period in the first World War; and at retail, living costs increased about the same amount in the first 25 months of the present conflict as in the same period in the years 1914-16.

Although the extent of the increase in the first 2 years of this war compares closely with that of 25 years ago, there have been important differences in the markets most affected. Metals and metal products and industrial chemicals, which presented very serious problems in 1916, were relatively orderly and stable in the first 9 months of 1941. The largest increases in the present conflict have been for farm products, foods, and textile products—in the light consumers' goods industries, rather than in the heavy industries.

In part these contrasts between conditions in this war and in the last may be explained by two underlying differences: In the first place, in the summer of 1939, prices in American markets and particularly in agricultural markets were at depressed levels, a condition which did not prevail in 1914. Therefore, substantial advances in prices of agricultural products, and consequently in foods and textile products derived from them, were to have been expected in the past 2 years. In the second place, control measures were instituted at an earlier stage in the present conflict than in World War I, when they were withheld until after the actual entry of the United States into the conflict. Although these measures have not been uniformly effective, they have contributed materially to stabilizing prices of products of the heavy industries.

Since the spring of 1941, while prices have been advancing, Government price controls have been extended rapidly. Nevertheless, prices have continued to rise persistently. Difficulties in enforce-



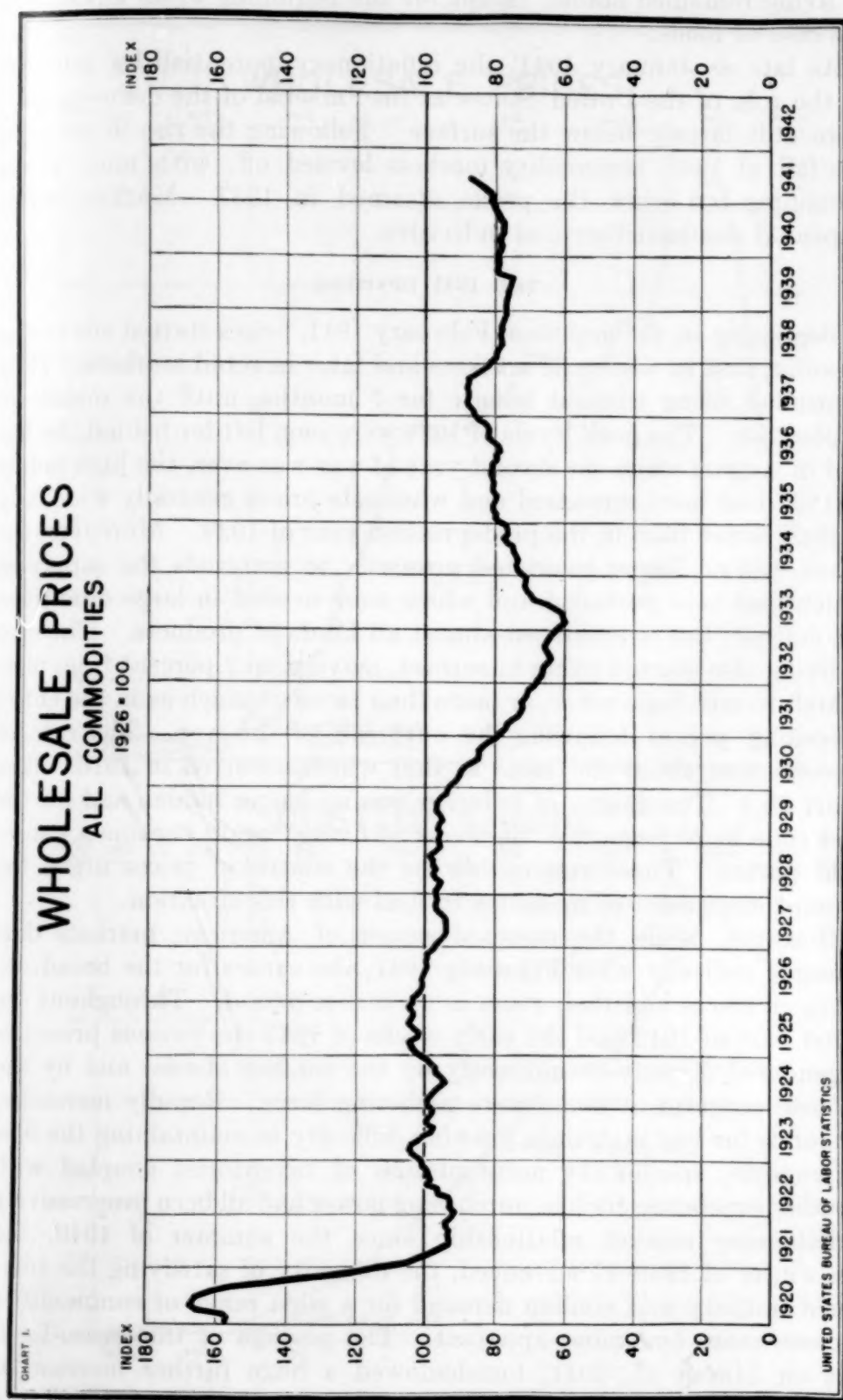
ment have been encountered, particularly when dealing with large numbers of small sellers, as in the scrap-metal markets. Prices of agricultural products have been allowed to rise freely, and this has rendered difficult the control of prices in the food and textile industries. The growing scarcity of many key commodities, the constantly increasing scope of the defense program and of lease-lend buying, and the sharp expansion of civilian purchasing power have subjected an ever-widening range of markets to great pressure. Unless a firm statutory base for price control is provided quickly, substantial further advances in the general price level appear inevitable.

### *General Course of Prices*

September 1941 marked the twenty-fifth full month of the ever-widening conflict which began when Germany marched into Poland at the end of September 1939. During this period and particularly since the summer of 1940, when the domestic defense program began, the economic disturbances engendered by the conflict have become more and more pervasive. At first the effects of these cumulative changes upon American commodity markets were limited. A brief speculative flurry immediately followed the outbreak of the war, but it quickly subsided. In the late months of 1939 there were serious shortages of a restricted number of products, the supply of which had been curtailed or which entered directly into the production of munitions, and prices of many of these articles advanced sharply. However, the majority of commodity prices were little, if at all, affected. At the end of the first year of war, in fact, the general level of wholesale prices in the United States had risen only 3 percent (see chart 1) and living costs had scarcely changed at all.

#### BEGINNING OF RISING MARKETS

The second year of war, however, told a very different story. The effects of the domestic defense program began to make themselves felt in earnest, and orders for munitions and supplies were placed by United States armed services in constantly increasing volume. In many cases the plant capacity was inadequate for filling these orders promptly, and prices of these products and of others directly related began to rise. During the latter part of 1940 the general level of wholesale prices advanced slowly but persistently, as one market after another felt the impact of defense buying. By the turn of the year, the wholesale price average had reached a point slightly in excess of that attained during the brief speculative flurry in the fall of 1939. By and large, however, the advance during the late months of 1940 remained orderly in character and limited in scope, and it was largely confined to wholesale industrial markets. Retail prices and the cost



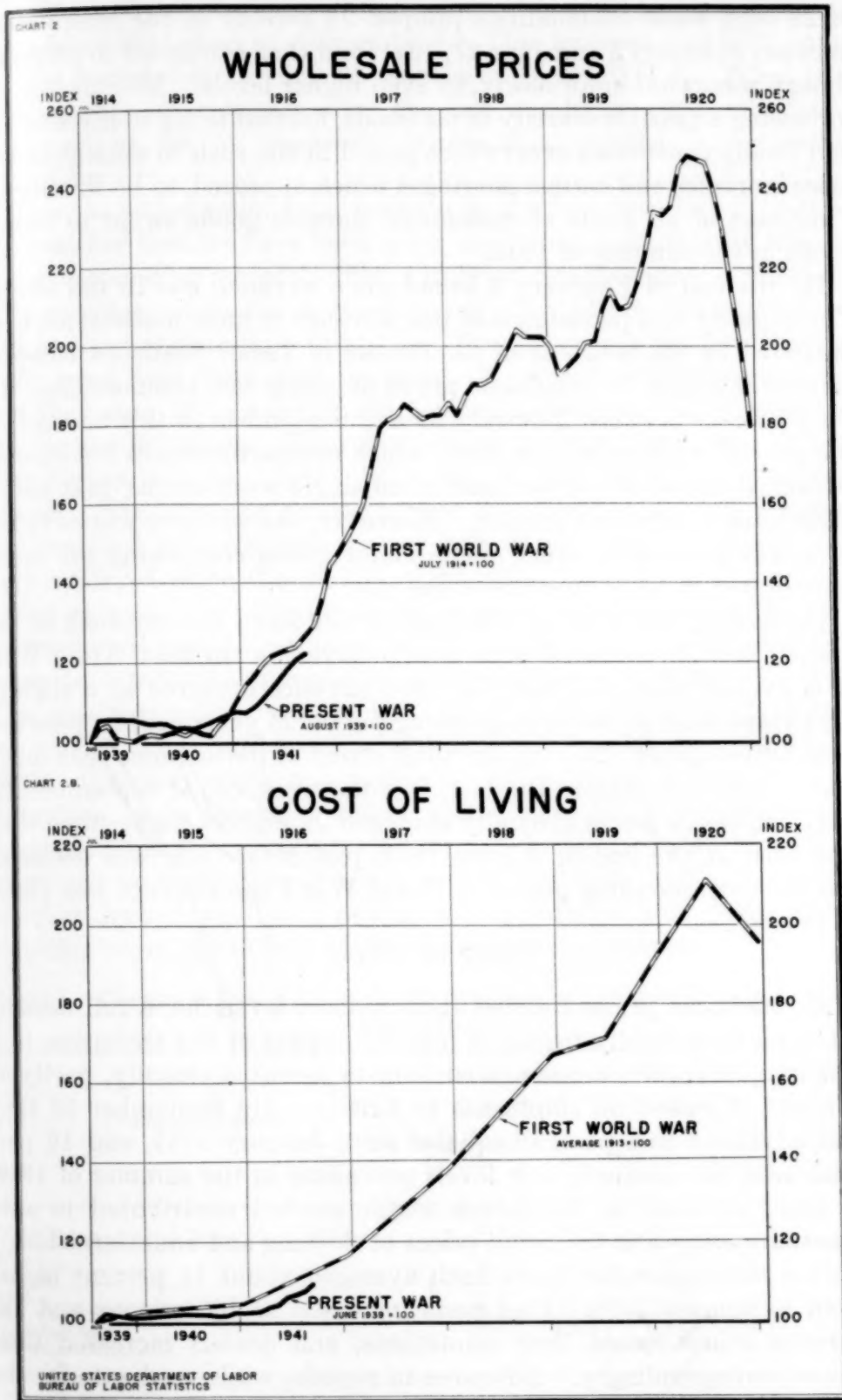
of living remained stable, except for the beginning of an advance in the cost of foods.

As late as January 1941, the inflationary potentialities inherent in the role of the United States as the "arsenal of the democracies," were still largely below the surface. Following the rise in prices in the fall of 1940, commodity markets leveled off, with most prices remaining far below the peaks attained in 1937. Market trends appeared contradictory and indecisive.

#### THE 1941 UPSWING

Beginning in the middle of February 1941, prices started advancing steadily, first in wholesale markets and later in retail markets. They continued rising without respite for 7 months, until the middle of September. The peak levels of 1939 were soon left far behind; by the end of August when the second year of war was over, the high points of 1937 had been surpassed and wholesale prices generally were only slightly lower than in the predepression year of 1929. Moreover, the move was no longer restricted primarily to materials the supply of which had been curtailed and which were needed in large quantities for defense, but it embraced almost all kinds of products. The cost of living also started rising in earnest, moving up 7 percent from mid-March to mid-September, or more than twice as much as in the entire preceding period following the outbreak of the war. The rate of increase was about the same as that which occurred in 1916. (See chart 2b.) The danger of inflation was no longer hidden and for the first time in 20 years the "high cost of living" again became a household phrase. Those responsible for the control of prices urged the prompt enactment of measures to deal with this situation.

However, while the outward aspect of American markets thus changed radically after February 1941, the causes for the broad upswing in prices had their roots in an earlier period. Throughout the latter part of 1940 and the early weeks of 1941 the various pressures engendered directly or indirectly by the conflict abroad and by the defense program at home were gathering force. Rapidly increasing demands for war materials, growing difficulty in maintaining the flow of imports, speculative accumulation of inventories coupled with steadily expanding civilian purchasing power had all been progressively unbalancing market relationship since the summer of 1940. As the winter of 1940-41 advanced, the difficulty of satisfying the combined military and civilian demand for a wide range of commodities became more and more apparent. The passage of the Lease-Lend Act on March 11, 1941, foreshadowed a huge further increase in purchases by the Government. Speculators began to sense the opportunity for large profits, and a concentrated wave of buying began to drive up the prices of basic commodities sold on organized





exchanges. The Bureau of Labor Statistics index of the spot prices of 28 such basic commodities jumped 25 percent in the brief period between February 5 and June 27, 1941, and then continued to progress, though somewhat more slowly, to even higher levels. Manufacturers, foreseeing a possible scarcity of materials, hurried to lay in inventories, and finally consumers everywhere joined in the rush to anticipate the price increases and certain shortages which appeared to be imminent. Purchases of all kinds of consumers' durable goods swept to record levels in the summer of 1941.

By the end of February a broad price advance was in full swing. The rapidity and persistence of this advance in most markets are best indicated by the behavior of the Bureau of Labor Statistics comprehensive index of the wholesale prices of nearly 900 commodities. In the 29 weeks between February 22 and September 13 this measure of the general wholesale price level, which ordinarily moves but slowly, advanced about 14 percent and in no single week during that entire period did it register a decline. Moreover, the advance was as broad as it was persistent; every single major group comprising the index contributed in some measure to the rise.

In chart 2, the trend of wholesale prices since the outbreak of the present war is compared with their behavior in the first World War. It is evident that although the 1941 advance occurred at a slightly later stage than in the corresponding period 25 years ago, its pace has been fully as rapid. Nor has the total extent of the advance been much less in this war than in the last. In the week ended September 27, 1941, wholesale prices generally averaged 22 percent higher than they had been at the end of August 1939, just before war was declared. For the corresponding period in World War I the advance was about 26 percent.

#### COST OF LIVING

As wholesale prices reached their highest levels for a full decade, retail markets finally began to feel the impact of the transition to a war economy. Food costs to consumers mounted steadily, partly as a result of lease-lend shipments to Britain. By September 15 they had advanced to a point unequaled since January 1931, and 19 percent over the unusually low levels prevailing in the summer of 1939. A rapid advance in the cotton textile market contributed to substantial increases in the retail prices of clothing and housefurnishings; during mid-September these both averaged about 11 percent higher than in August 1939. Fuel costs increased as bituminous and anthracite mines raised their quotations, and dealers increased their prices correspondingly. Advances in rentals, while moderate for the Nation's large cities as a whole, reached serious proportions in defense areas where acute housing shortages developed.



As a result of this broad advance in all of its major elements, living costs generally in the United States were almost 10 percent higher in September 1941 than in August 1939. This increase was fully equal to that recorded in the first 25 months of World War I. When it is recalled that immediately after the last war living costs eventually advanced as far as wholesale prices, this parallel is somewhat disturbing.

There is added ground for concern in the fact that living costs in the past few months have been rising somewhat more rapidly than in the corresponding period in 1916, a contrast clearly shown in chart 2b. This recent acceleration in the rate has affected all major groups of commodities and services (table 1). From their low levels in August 1939, retail food costs went up about 19 percent to September 1941; and they rose 13 percent in the 6 months between mid-March and mid-September alone. Housefurnishings in September were 11 percent higher than in August 1939 and 10 percent higher than last March. Similarly, the greater part of the advances in retail prices of clothing and miscellaneous items, and in the cost of rentals, has been achieved since the middle of March.

Not only has the consumer been required to pay more for his purchases, but the quality of many of the articles which he could obtain began to deteriorate appreciably in the summer and autumn of 1941. This was particularly true in the case of apparel and textile housefurnishings. Silk and wool were being mixed with cheaper fibers; South American wool was replacing the superior Asiatic product in making rugs; fabrics of looser weave were being substituted for those of higher thread count; corners were being cut in workmanship; trimmings on clothing were becoming less elaborate; and a wide range of other devices was being attempted, in order to hold down manufacturing costs in the face of rising raw-material markets.

TABLE 1.—Changes in Cost of Living During Present War Period in 20 Large Cities, by Groups of Items

Commodity group	Index numbers (1935-39=100)			Percent of change from—	
	August 1939.	March 1941	September 1941	August 1939 to September 1941	March 1941 to September 1941
All items.....	98.6	101.2	108.1	9.6	6.8
Food <sup>1</sup> .....	93.5	98.4	110.8	18.5	12.6
Clothing.....	100.3	102.1	110.8	10.5	8.5
Rent.....	104.3	105.1	106.8	2.4	1.6
Fuel, electricity, and ice.....	97.5	100.7	103.7	6.4	3.0
Housefurnishings.....	100.6	101.6	112.0	11.3	10.2
Miscellaneous.....	100.4	101.9	105.0	4.6	3.0

<sup>1</sup> Covers 51 cities.

In some cases, of course, these practices may be more desirable than the price increases they were designed to avert, particularly when they

relate to unessential elements of style or appearance which do not affect serviceability. Frequently, however, the deterioration impairs the life or usefulness of the article to an extent more than balancing any possible savings in the initial outlay of the consumer. Although the net effect of these quality modifications cannot be measured precisely, they are undoubtedly equivalent to a significant further advance in living costs.<sup>1</sup>

#### PRICE CONTROLS

As the price advance gathered momentum, concern over the need for control increased, and discussion of methods and objectives of price control became more general. In the early months of the war, during the initial speculative upswing, the President instructed the Temporary National Economic Committee to watch commodity markets and to report instances of unwarranted price increases.<sup>2</sup> The only means available to the Committee to make its work effective was that of publicity, but there was no firm basis for a broad price advance at that time and an occasional press release on the price situation during the early speculative period proved moderately effective in discouraging deliberate profiteering. The prolonged price decline in the first half of 1940, coupled with the termination of the Committee's work, brought this early effort to an end.

With the establishment of the Advisory Commission to the Council of National Defense, Leon Henderson was appointed Price Stabilization Commissioner by Executive order of May 29, 1940. Acting under the general emergency powers of the President, his office sought to prevent price increases for key commodities, particularly for those directly affected by the defense effort, such as metals and lumber. In most cases this was achieved by informal agreement with the producers of the commodities involved. In a few instances, however, as in the case of scrap metals, such agreements could not be obtained or were not observed, and orders establishing price ceilings were issued. Since the Commission was advisory, the only power for enforcement was the pressure of public opinion and the extreme—and unused—power vested in the President to commandeer.

The violent price increase which commenced in February of 1941 indicated the need for stronger measures. Accordingly, the Office of Price Administration and Civilian Supply was created by Executive order on April 11, 1941, and Leon Henderson was made Administrator. This Office was entrusted with responsibility not only for prices, but also for allocation of scarce commodities for civilian use, and to it was transferred the Consumers' Division of the Defense Advisory Commission. Subsequently, on August 28, 1941, the authority regarding

<sup>1</sup> See *Monthly Labor Review*, February 1941 (pp. 286-291): *Effects of Rising Costs on Quality of Wearing Apparel*, by Laura Mae Brown.

<sup>2</sup> Hearings, Temporary National Economic Committee, Vol. 21 (p. 11151).

civilian allocation was shifted to the Office of Production Management from this organization, whose title was then changed to Office of Price Administration.

OPACS (later OPA) began to intervene actively in a large number of markets. The technique of seeking to curb advances by voluntary agreements of various kinds was not abandoned, but formal price ceilings were issued for a constantly growing list of products.<sup>3</sup> By the end of September such formal ceilings had been published covering fully 10 percent by value of the nearly 900 products included in the Bureau of Labor Statistics index of wholesale prices. Actually the extent of coverage was much greater than is indicated by this ratio, both because of the substantial number of informal agreements which were in effect and because of the indirect consequences of the controls which had been established. Thus, the establishment of price ceilings for cotton gray goods closely influenced the price of finished cotton cloth and has already materially affected the prices of cotton clothing and housefurnishings. When these factors are taken into account, it is estimated that prices of products aggregating between 15 and 20 billion dollars in total value had been subjected to more or less direct controls by the end of September.

These controls have not been of uniform effectiveness by any means. In some cases technical flaws were discovered in the original orders, most of which were later remedied. More serious, however, was the lack of any firm statutory base of authority, providing effective penalties for violation. In some industries, particularly in those composed of a large number of scattered sellers such as the scrap-metal trades, price ceilings were poorly observed and chaotic conditions prevailed.

Consequently a bill was introduced into Congress at the end of July 1941,<sup>4</sup> providing for the issuance and enforcement of price ceilings. A principal criterion proposed for the ceiling level was the price actually prevailing on July 29, 1941, although consideration could also be given to such factors as speculation, profits, etc. Prices of agricultural products could not be set below 110 percent of parity, as defined by the Department of Agriculture.

There has been fairly general agreement as to the need for some sort of control, but there has been intense controversy as to its form. Among the issues argued before the House Committee on Banking and Currency during its consideration of the bill were the desirability of controlling wages, the precise terms of control of agricultural prices, the relative desirability of one-man or commission administration, and the feasibility of an alternative form of control such as placing a blanket ceiling over prices of all goods and services, including wages,

<sup>3</sup> By the end of September, 30 price ceilings had been established (see table 6 at end of this article).

<sup>4</sup> H. R. 5479 (75th Cong., 1st sess.): A bill to further the national defense and security by checking speculative and excessive price rises, price dislocations, and inflationary tendencies, and for other purposes.



at the levels prevailing on a stipulated date.<sup>5</sup> At the present writing none of these issues has been resolved.

### Characteristics of 1941 Upswing

Between February 22, when prices turned decisively upward and September 27, 1941, the general wholesale price level as measured by the Bureau of Labor Statistics comprehensive wholesale price index rose 13½ percent. Naturally the extent of this advance varied considerably for different commodity groups, ranging from 28 percent for farm products to less than 1 percent for metals and metal products (table 2). To a considerable extent these differences in pace reflected the variations in behavior characteristic of different kinds of commodities; farm products, many of which are traded in organized exchanges, have always fluctuated more freely and widely than highly fabricated goods such as most steel products. In good part, however, these differences in the rate of advance have been due to specific forces acting in particular markets, to the nature of individual demand and supply situations, to the readiness with which sellers have seized upon the opportunity to obtain more for their products, and to the character and effectiveness of controls imposed by the Government. The significance of these variations can best be appraised by examining in detail the conditions surrounding a few of the more important major groups of commodities.

TABLE 2.—Changes in Wholesale Prices During Present and Past War Periods

Groups and subgroups	Percent of increase from—			
	Feb. 22, 1941, to Sept. 27, 1941 (7 months)	Aug. 10, 1940, to Sept. 27, 1941 (13 months)	Aug. 26, 1939, to Sept. 27, 1941 (25 months)	July 1914 to August 1916 (25 months)
All commodities.....	13.4	18.6	21.9	26.4
Farm products.....	28.1	37.9	47.1	20.6
Grains.....	33.2	39.1	61.8	47.8
Livestock and poultry.....	22.2	48.5	55.3	14.4
Other farm products.....	31.2	30.6	38.3	12.0
Foods.....	19.7	26.4	31.3	22.1
Dairy products.....	15.5	23.9	35.3	12.2
Cereal products.....	12.8	9.1	15.5	.....
Fruits and vegetables.....	17.5	7.0	20.0	.....
Meats.....	15.0	33.5	31.7	13.5
Other foods.....	35.2	42.8	44.0	31.4
Hides and leather products.....	10.2	14.7	21.3	32.1
Shoes.....	9.3	9.7	16.5	23.8
Hides and skins.....	19.9	42.3	50.0	36.0
Leather.....	6.5	13.0	19.7	44.3
Other leather products.....	7.4	7.4	12.0	28.8
Textiles.....	18.5	24.8	32.9	29.7
Clothing.....	11.0	13.0	18.3	.....
Cotton goods.....	35.5	53.1	59.9	19.6
Hosiery and underwear.....	6.3	4.3	4.1	.....

<sup>5</sup> United States House of Representatives. Committee on Banking and Currency. Hearings \* \* \* on H. R. 5479 (75th Cong., 1st sess.).

TABLE 2.—Changes in Wholesale Prices During Present and Past War Periods—Con.

Groups and subgroups	Percent of increase from—			
	Feb. 22, 1941, to Sept. 27, 1941 (7 months)	Aug. 10, 1940, to Sept. 27, 1941 (13 months)	Aug. 26, 1939, to Sept. 27, 1941 (25 months)	July 1914 to August 1916 (25 months)
<b>Textiles—Continued.</b>				
Rayon.....	2.0	2.0	5.6	25.1
Silk.....	19.8	21.2	17.6	
Woolen and worsted goods.....	14.1	21.7	35.3	
Other textile products.....	23.3	32.0	49.4	
<b>Fuel and lighting materials.</b>	10.2	11.9	9.4	22.3
Anthracite.....	4.8	8.1	17.7	7.5
Bituminous coal.....	6.9	11.6	11.7	10.9
Coke.....	7.3	11.4	17.2	23.7
Electricity.....	<sup>1</sup> 8.3	<sup>1</sup> 9.1	<sup>1</sup> 16.3	
Gas.....	3.3	<sup>1</sup> 7.6	<sup>1</sup> 9.1	1.3
Petroleum products.....	23.9	26.0	19.4	39.1
<b>Metals and metal products.</b>	.8	4.0	5.6	43.9
Agricultural implements.....	.3	.7	1.5	<sup>1</sup> 3.0
Iron and steel.....	1.4	2.5	1.9	84.7
Motor vehicles.....	.1	5.9	8.0	<sup>1</sup> 15.1
Nonferrous metals.....	.4	4.5	12.9	97.6
<b>Building materials.</b>	7.8	15.3	19.3	27.6
Brick and tile.....	4.6	5.8	5.4	12.1
Cement.....	1.5	1.8	1.0	20.5
Lumber.....	12.4	35.5	43.2	7.6
Paint and paint materials.....	9.7	12.8	16.0	51.3
Plumbing and heating.....	5.4	8.0	9.5	5.4
Structural steel.....	0	0	0	128.3
Other building materials.....	5.8	7.1	12.0	47.5
<b>Chemicals and allied products.</b>	12.2	14.9	18.7	87.5
Chemicals.....	3.1	4.2	16.1	103.0
Drugs and pharmaceuticals.....	9.1	10.3	45.5	43.4
Fertilizer materials.....	9.4	12.9	14.3	136.0
Mixed fertilizers.....	4.5	5.9	4.8	66.3
Oils and fats.....	101.5	133.6	131.3	
<b>Housefurnishing goods.</b>	9.0	9.2	13.0	9.5
Furnishings.....	7.5	8.0	13.7	13.8
Furniture.....	10.8	10.9	12.0	4.5
<b>Miscellaneous.</b>	11.0	11.0	16.4	14.3
Auto tires and tubes.....	4.5	4.5	.5	<sup>1</sup> 5.6
Cattle feed.....	58.3	58.7	83.0	4.1
Paper and pulp.....	9.2	9.0	27.5	74.7
Rubber, crude.....	8.8	10.6	34.0	<sup>1</sup> 3.9
Other miscellaneous.....	10.5	10.2	12.4	7.5
<b>Raw materials.</b>	20.8	28.2	34.4	21.1
Semimanufactured goods.....	10.9	17.0	21.4	65.9
Manufactured products.....	10.8	14.7	16.9	24.2
All commodities other than farm products.....	10.8	15.1	17.6	28.5
All commodities other than farm products and foods.....	8.9	11.9	14.4	30.7

<sup>1</sup> Decrease.

## FARM PRICES

By far the sharpest increase in price experienced by any major group of commodities since the outbreak of the war has occurred in the case of farm products, which rose 47 percent between August 26, 1939, and the end of September 1941. This advance has been more than twice as rapid as that which occurred in the first 25 months of World War I, when wholesale prices of farm products rose only 21 percent. In interpreting the significance of this contrast, however, it should be borne in mind that average farm prices at the end of August 1939 were at their lowest levels in 5 years, following a sharp



and sustained decline from the peaks attained during the short-lived 1937 boom. Moreover, as noted, prices of farm products as a rule move more widely and more rapidly than prices of industrial goods, responding quickly and freely to changes in market conditions.

However, even after due allowance is made for all these factors, the extent of the advance in farm prices is impressive. Thus, during September 1941, prices of farm products as computed by the Bureau of Labor Statistics were 20 percent higher than the average for the 5 years, 1935-39, a period which included a boom as well as a recession, and which may, therefore, constitute a fair general measure of pre-war price relationships.

*Grains.*—One of the more important causes for the extent of the recent upswing in farm prices has been the Government program in its various phases. Thus, for the week ended September 27, 1941, grain prices were more than 60 percent higher than in August 1939. By far the greater part of this advance occurred after the end of February 1941 (see table 2) notwithstanding the fact that current supplies of leading grains were at record high levels. For example, the July 1 carry-over of wheat was 386 million bushels, the largest in history; the 1941-42 crop was estimated in August at more than 1¼ billion bushels and the prospective 1942 carry-over at 636 million bushels.<sup>6</sup> Similarly high supplies and carry-over were reported for corn. Moreover, despite some Government purchases for shipment abroad, the rate of exports in the near future will be substantially smaller than in 1938 or 1939.

The increases in grain prices appear to reflect directly the removal of large quantities of grain from the market by the Government's loan program, the recent increase in the basis of loan value to 85 percent of parity, and speculation based upon the prospects of higher prices.

*Livestock and poultry.*—The increase in the prices of the second major group of farm products—livestock and poultry—has been only slightly less than that for grains. As compared with August 1939, average prices of livestock and poultry had risen 55 percent by the beginning of October 1941 (table 2); as compared with the 1935-39 average, the increase was about 21 percent. The move has been considerably sharper for hogs than for steers; at the end of September hogs (good to choice, 200-220 lbs.) were quoted at \$11.18 a hundred-weight in Chicago as compared with \$6.73 on August 31, 1939, an increase of 66 percent, while for steers the advance during the same period amounted to only 23 percent (steers, good, 900-1100 lbs., Chicago). In fact, steer prices failed conspicuously to share equally in the general advance which began in February. This contrast is largely explained by the fact that the 1940-41 supply of hogs was somewhat less than it had been in the marketing year 1939-40, whereas supplies

<sup>6</sup> U. S. Department of Agriculture, *The Demand and Price Situation*, August 1941 (p. 12.)

of beef cattle were appreciably larger. Moreover, substantial quantities of pork products were purchased by the Government for lease-lend shipment to England during the spring and summer. It is estimated by the Department of Agriculture that between April 1 and September 30, 1941, about 13 percent of the meat obtained from hogs and about 32 percent of the lard produced were purchased in this way for export. Coming at a time when the purchasing power of domestic consumers was rising rapidly as pay rolls expanded in defense industries, the removal of these supplies from the market led directly to higher prices.

*Cotton.*—One other farm product of primary importance—cotton—has also increased considerably in price in recent months. On October 1, 1941, the average price of cotton (middling,  $\frac{5}{16}$  inch staple) on 10 leading spot markets was slightly more than 17 cents per pound or almost double the pre-war quotation of 8.7 cents, and higher than at any time between 1930 and the summer of 1941. Here again the greater part of the increase came after the beginning of February, when cotton was still selling at about 10 cents a pound. Although domestic demand for cotton goods increased substantially during this period, both for equipping the Army and for civilian use, this 70-percent jump in prices can be explained only as a direct result of anticipated Government action to support the market. Prices first started rising rapidly in the spring when the bill raising the loan value on certain farm products to 85 percent was introduced and was on its way to enactment.<sup>7</sup>

A further sharp speculative spurt occurred in the summer, when Congress was acting favorably upon a bill designed to freeze stocks held as security for Federal loans on cotton for the duration of the emergency. A subsequent veto of this measure by the President was followed by a minor, temporary reaction. The market apparently continued to reflect the belief that Federal action would support a high price for cotton.

The increases which have been described for grains, livestock, and cotton are illustrative of what has occurred for a much wider range of farm products, such as soybeans, eggs, milk, and many others. The extent of the price moves in each of these markets has varied considerably, reflecting the special situations involved, but the same underlying conditions were at work in most cases. Sharply increased public purchasing power; heavy Government buying of many farm products; crop loans, curtailment and direct price-fixing programs; and lease-lend purchases for shipment abroad—all have combined to create a sellers' market and to foster speculative activity.

<sup>7</sup> Pub. Res. No. 74 (75th Cong., 1st sess.), approved May 26, 1941.

*Parity prices.*—The increase in farm prices generally was so rapid that by the early fall of 1941 the long-sought goal of parity between prices paid and prices received by farmers had been achieved. For the first time in 20 years the prices of goods farmers sell bore a more favorable relation to the prices of goods they buy than prevailed during the period 1910-14. The improvement in the market position of farmers since the outbreak of the present war is shown in table 3. In August 1939, the prices received by farmers were 12 percent below the average for the years 1910-14, whereas the prices they were paying were 25 percent higher than in that period. By September 1941 equality had been achieved, with prices paid by farmers, including taxes and interest, 37 percent over the 1910-14 base, while prices received were 39 percent above the base period.<sup>3</sup>

TABLE 3.—*Indexes of Prices Paid and Received by Farmers, and Parity Ratios, August 1939 to September 1941*<sup>1</sup>

Year	Indexes (1910-14=100) of—		Parity ratio	Year	Indexes (1910-14=100) of—		Parity ratio
	Prices paid by farmers, including interest and taxes	Prices re- ceived by farmers, including interest and taxes			Prices paid by farmers, including interest and taxes	Prices re- ceived by farmers, including interest and taxes	
1939				1940—Continued			
August.....	125	88	70	September.....	127	97	76
September.....	128	98	77	October.....	127	99	78
October.....	128	97	76	November.....	127	99	78
November.....	128	97	76	December.....	128	101	79
December.....	128	96	75	1941			
1940				January.....	128	104	81
January.....	127	99	78	February.....	128	103	80
February.....	127	101	80	March.....	129	103	80
March.....	128	97	76	April.....	129	110	85
April.....	128	98	77	May.....	130	112	86
May.....	128	98	77	June.....	132	118	89
June.....	128	95	74	July.....	133	125	94
July.....	127	95	75	August.....	135	131	97
August.....	127	96	76	September.....	137	139	101

<sup>1</sup> Data are from U. S. Department of Agriculture Midmonth Local Market Price Report.

These are, of course, average figures and they do not show what happened to individual farmers. Those producing certain crops fared considerably better than those producing others. The extent of these individual disparities is shown in table 4, for a number of leading farm products. Producers of cotton, wool, butter, livestock, and poultry were all obtaining better-than-parity prices in September. The position of grain farmers had also been materially bettered since the outbreak of the war, but they had not quite achieved parity. On the other hand, the position of peanut growers and producers of certain other specialty crops had scarcely improved at all.

<sup>3</sup> U. S. Department of Agriculture. Midmonth Local Price Reports.



TABLE 4.—Prices Received and Parity Prices of Selected Farm Products, August 1939 and September 1941<sup>1</sup>

Product	Unit	August 1939		September 1941	
		Average price received	Parity price	Average price received	Parity price
Cotton.....	Pound.....	\$0.087	\$0.155	\$0.1753	\$0.1699
Corn.....	Bushel.....	.457	.802	.708	.880
Wheat.....	Bushel.....	.545	1.105	.958	1.211
Hay.....	Ton.....	6.770	14.840	7.940	16.260
Potatoes.....	Bushel.....	.691	.853	.644	.945
Oats.....	Bushel.....	.254	.499	.399	.547
Beef cattle.....	Hundredweight.....	6.500	6.510	9.360	7.140
Hogs.....	Hundredweight.....	5.470	9.020	11.100	9.890
Chickens.....	Pound.....	.130	.142	.163	.156
Eggs.....	Dozen.....	.175	2.232	.303	2.333
Butter.....	Pound.....	.224	2.306	.372	2.348
Wool.....	Pound.....	.220	.229	.363	.251
Veal calves.....	Hundredweight.....	8.130	8.440	11.260	9.250
Lambs.....	Hundredweight.....	6.940	7.340	9.840	8.040
Peanuts.....	Pound.....	.0339	.060	.0449	.0658

<sup>1</sup> Data are from U. S. Department of Agriculture, "The Agricultural Situation."<sup>2</sup> Adjusted for seasonality.

## FOOD PRICES

One of the direct results of higher farm prices was a broad and substantial advance in the wholesale prices of foods, which by the end of September were more than 30 percent higher than in August 1939 and about 20 percent higher than at the end of February 1941.

As in the case of farm products, the advance in foods (which were also at relatively low levels when the war broke out) has been much sharper in this war than during the corresponding period of World War I, when the rise amounted to only 22 percent. The disproportion between the current advance and that of 25 years ago is particularly evident for dairy products and meats, which have risen  $2\frac{1}{2}$  to 3 times as fast as they did in the period 1914-16 (table 2).

In part, this may be explained by a marked difference in the nature of United States exports to Europe. In World War I, grains and particularly wheat were primarily affected; at present, purchases by the Surplus Marketing Administration for lease-lend shipment to England include large quantities of ham, bacon, and lard, and of dairy products such as cheese, eggs, and evaporated milk. In the last war England was able to obtain many of these latter products from Continental sources, such as Denmark, which are now entirely under Axis domination.

Exceptionally sharp price increases also occurred for edible fats and oils such as cottonseed oil, lard, and butter. On September 30, 1941, cottonseed oil at New York (prime, summer, bleachable) was quoted at 13.9 cents a pound as compared with 5.6 cents at the end of August 1939 and 6.3 cents early in February 1941; thus, in the period of 8 months alone, the increase was more than 120 percent. During the same period the price of lard had almost doubled, the quotation for "prime western" in New York rising from 5.9 cents on February 1 to

11.3 cents on September 30. Probably the most important single recent influence in these markets was the purchase during the spring and summer of about one-third of the lard production for lease-lend shipment to Britain. While the carry-over of lard remained near its all-time peak, market sentiment was naturally affected by the size of these purchases and by the prospect of their continuation. Since all food fats and oils are interchangeable to some degree, higher prices for lard naturally stimulated the markets for other edible fats and oils.

*Imported foods.*—Prices of foodstuffs which are largely or entirely imported, such as sugar, coffee, cocoa, and spices, have advanced about as much as domestic products. Prices of Santos coffee in New York at the end of September were 84 percent higher than before the war and for Accra cocoa 87 percent higher; in both these cases the greater part of the increase occurred in the spring of 1941. To some extent, higher prices for these imports were due to increased shipping costs; the freight rate for bringing sugar from Cuba to the United States, for example, had tripled since the war began. However, there has been no actual shortage of any of these commodities in the United States, and in most cases imports have kept pace with consumption.

More important than either higher shipping rates or shipping scarcity, in the case of coffee and cocoa, have been international programs designed to raise the prices of these products in the interest of the producing nations. Thus, a quota system was established for coffee in order to limit price competition among the various producing countries. The United States participated actively in establishing this plan as part of its program for promoting better Latin American relations. At the same time the producing nations themselves inaugurated price-fixing programs at the source in order to compensate for the lower volume of exports allowed under these quotas. In the case of cocoa, the establishment of a similar system was proposed early in the year and prices advanced in anticipation of its approval; these increases were maintained even though the plan was never formally adopted.

*Price controls.*—Efforts on the part of the Government to hold down prices of foods have thus far been limited largely to these imported products. After the price of Santos coffee had advanced from its low level of about 8 cents in February 1941 to 13.4 cents in August, it was announced that quotas would be liberalized as of October 1, and the price remained approximately stable at the latter figure throughout September. In the case of sugar a speculative flurry in July 1941 led to the imposition of a direct price ceiling at \$3.50 per hundred pounds, duty paid. This action was vigorously protested by interests in Cuba, but it has apparently been possible to conclude



contracts for adequate shipments from that Republic, notwithstanding these protests.

As regards domestic foodstuffs, the only important direct action taken to prevent price advances was in the case of cottonseed oil. At the end of June, following an exceedingly sharp advance in the price of this commodity, the Office of Price Administration announced its intention to impose a price ceiling. Upon further study, however, this proposal was abandoned in favor of regulations, affecting both cottonseed and other oils (table 6, p. 1101), intended to prohibit certain types of market manipulation which appeared to have aggravated the situation. There was, meantime, a strong move among producing interests in the South to sustain the price, and about this time a statement was issued by Senator Bankhead of Alabama advising farmers to hold their cottonseed until the price reached \$60 a ton, a level which was soon thereafter attained. Whether the regulations which were imposed by the Office of Price Administration would be adequate to prevent still further price advances was not yet clear by the end of September.

#### PRICES OF TEXTILE PRODUCTS

The increase in wholesale prices of textile products from the outbreak of war to the early autumn of 1941 was of about the same dimensions as that for foods—33 percent, as compared with 31 percent. In the corresponding period in World War I, the rise in textile prices was very similar, amounting to just under 30 percent. However, the contrast between conditions today and those 25 years ago is much greater than these average figures would indicate. In the period between 1914 and 1916, prices of woolen and worsted goods showed the widest advances, amounting to slightly more than 45 percent between July 1914 and August 1916, whereas cotton goods rose only 20 percent in the same period. Between August 1939 and the end of September 1941, on the other hand, woolen and worsted goods advanced only 35 percent, whereas cotton-goods prices jumped 60 percent (table 2).

*Cotton goods.*—This difference in the nature of the products most affected became evident only in the spring of 1941. In the first year of the present war, as in World War I, it was wool and woolen products which showed the sharpest increases, while cotton and cotton goods showed little net advance between August 1939 and August 1940. The outbreak of hostilities was immediately followed by the purchase of the entire Australian wool clip by Britain, and the consequent curtailment of American wool imports resulted in rapid advances in price. Not until heavy Army orders for many kinds of cotton goods and cotton garments came into the market in the fall of 1940 did prices of cotton fabrics really start to advance. At first these in-

creases were largely confined to the fabrics and yarns directly affected, such as heavy ducks and osnaburgs, twill and jean cloth for shirts, denim for work clothing, and yarns for hose. There was some transfer of looms to these constructions, but price advances for products designed for civilian consumption remained moderate. Moreover, the price of raw cotton hardly rose at all between August 1940 and February 1941. Consequently, the increases in yarn and fabrics prices which did occur represented largely a widening of mill margins made possible by urgent Army needs.

In the spring of 1941 the advance started to broaden rapidly and at the same time the price of raw cotton in 10 spot markets rose from about 10 cents per pound in February to a peak of 17.77 cents on September 9. Prices of gray goods more than kept pace with rising raw-material costs, so that by the end of June, mill margins had reached their highest levels in 20 years.<sup>9</sup> To a minor extent, this increase in manufacturing margins may have reflected higher operating costs following a general wage increase in March, but the greater part of the advance can be accounted for only as representing a sudden transition to a strong sellers' market in which buyers bid prices up almost without reference to costs. As an indication of the extent of the increase, the quotation for print cloth (28½ inch, 64 x 60, 5.35 yards per 16, N. Y.), which is generally accepted as representative of the movement of cotton cloth, jumped from 5.69 cents per yard at the beginning of February to 9.25 cents at the end of June, a rise of 63 percent.

*Rayon fabrics.*—The advance in prices of cotton fabrics may have been in part responsible for a simultaneous increase in quotations for rayon fabrics. The average quotation for six different kinds of rayon gray goods rose about 40 percent between March 30 and August 21, 1941.<sup>10</sup> Many popular constructions could not be obtained on a spot basis for mills in the summer of 1941 because the unprecedented demand for these fabrics far exceeded the allotments by yarn manufacturers to weavers and even strained the rayon-weaving facilities. The situation was further intensified at the beginning of August by the freezing of silk stocks. The advance in cloth prices occurred despite the fact that yarn quotations were stable until the middle of September.

*Price controls.*—As prices continued to mount, increased efforts were made to control the situation. At first it was sought to achieve this end by conferences and voluntary agreements with cotton textile mills, but these attempts proved futile. Finally, schedules of maximum prices for certain constructions of yarn and gray goods were issued by

<sup>9</sup> Mill margins for 17 constructions of cotton goods, as computed by the U. S. Department of Agriculture, rose from 11.42 cents per pound of raw cotton processed in August 1939 to 21.84 cents in June 1941. Following the establishment of price ceilings, margins declined slightly to an average of 20.01 cents in September.

<sup>10</sup> Bureau of Labor Statistics data based on two combination weaves, one spun rayon, one taffeta, one satin, and one twill.

the Office of Price Administration and Civilian Supply on May 24 and June 28, respectively (see table 6), and subsequently control was extended to a fairly complete range of these products. The imposition of these ceiling levels was soon followed by some narrowing of mill margins, because prices of raw cotton continued to rise. As a result, although mill margins remained far above pre-war levels, orders were issued on July 19, 1941, raising the price ceilings. Subsequently, a flexible form of control was substituted, by the Office of Price Administration, providing for automatic adjustments in the ceiling prices for every change of 0.437 cent in the average price of cotton in 10 spot markets, as reported by the Department of Agriculture.<sup>11</sup> Whether this device will prove successful or whether it will encourage speculation and manipulation is not yet clear.

As regards rayon goods, no price ceiling was imposed until August 25, 1941, on which date an order was issued fixing maximum prices for various constructions at levels about 15 to 20 percent below those which had prevailed just previously. These ceilings were, however, about 20 percent higher than the prices in effect during February of this year. On September 15 manufacturers of rayon yarn increased their quotations by about 4 percent to apply to contracts for delivery in October or later, but this change was not considered sufficient to warrant corresponding upward revision of the price ceiling by the Office of Price Administration.

In the field of imported textiles, the most serious problems have arisen in connection with silk and burlap. In the former case, increasing political tension between Japan and the United States was reflected in a sudden spurt in the price of this product from \$3.105 on July 21 to \$3.595 on July 25, 1941 (13/15 denier, 78 percent, N. Y.). On the latter date, trade relations between the United States and Japan were in effect broken off by an order freezing all Japanese assets in this country. Administrator Henderson of the Office of Price Administration and Civilian Supply immediately requested a suspension of trading in silk futures and simultaneously announced his intention to establish a ceiling for raw silk prices at the level prevailing on July 21, the day before the sudden spurt began. This order was issued on August 2 (table 6), establishing the maximum price for the basic grade (D grade 13/15 denier) at \$3.08 per pound, and it has since remained in effect. In the meantime, the Office of Production Management took prompt steps to conserve the available supply of silk for military use and on August 2 virtually all processing of raw silk except to fill national defense orders was prohibited.<sup>12</sup>

In the case of burlap, a product widely used in packaging all kinds of commodities, the price situation was considerably more com-

<sup>11</sup> U. S. Office of Price Administration. Price Schedule No. 35, October 21, 1941.

<sup>12</sup> U. S. Office of Production Management. Amendment to General Preference Order No. M-22.



plex. Burlap prices began rising steadily shortly after the outbreak of the war. At the end of August 1939 the quotation for this product (10½ ounce, 40 inch per pound) delivered in New York was 5.7 cents per yard; by July 18, 1941, it had reached a peak of 14.2 cents, representing a jump of about 150 percent. About one-half of this increase represented higher quotations at the primary market in Calcutta; the other half reflected higher shipping costs and substantially wider margins for importers. The importance of burlap to American farmers, because of its extensive use in packing farm supplies and crops, rendered the situation particularly serious. As a result, a price ceiling was imposed by the Office of Price Administration and Civilian Supply on August 16 fixing the maximum New York price for the standard 40-inch 10½-ounce construction at 11½ cents per yard until January 1, 1942, when it was to be reduced automatically to 11 cents. In view of the absence of concurrent controls upon the Calcutta market through diplomatic action or otherwise, the effectiveness of this ceiling was soon impaired by the continued rise of prices at Calcutta, which in September reached levels at which further importation was impossible. As a result, trade in burlap in the United States ceased almost completely. At the end of September, it was evident that either adjustment of the price ceiling imposed or other action designed to affect the Calcutta market would be essential.

The only major textile market which has as yet escaped control is that for wool and worsted products. During the entire spring and summer of 1941, while quotations for cotton, rayon, and silk products were advancing rapidly, the markets for raw and semifinished wool remained orderly and relatively stable.

#### PRICES OF METALS AND METAL PRODUCTS

Among the various commodity groups, metals and metal products afford the sharpest contrast between this war and the last. From the end of August 1939 to September 27, 1941, the wholesale price index for this group rose only 6 percent, whereas in the first 25 months of World War I there was an increase of 44 percent. List prices of iron and steel products were up only 2 percent in the first 2 years of this war, as compared with 85 percent in World War I; for nonferrous metals the increase was 13 percent as compared with 98 percent 25 years ago (table 2). This contrast is particularly remarkable in view of the tremendous strain under which American metal-producing industries have been operating; there was practically no important metal for which available producing capacity was not far below demand, after the defense program had been under way for a little more than a year.

The explanation for this remarkable stability in spite of unprecedented demand can be attributed directly to the promptness with



which both Government and industry recognized the need for effective cooperation. Conferences between leading producers of metals and the Price Commissioner of the Advisory Commission to the Council of National Defense were held early in the fall of 1940, when defense orders were just beginning to be placed in volume. Voluntary agreements were quickly reached to stabilize prices of basic iron and steel products, copper, zinc, lead, and other metals. The small number of producers in each field was undoubtedly an important factor in simplifying these negotiations and in facilitating their subsequent observance. In fact, in some cases (e. g., lead and zinc) these arrangements worked so well that no formal ceilings had been issued by the price regulating agencies by the early fall of 1941.<sup>13</sup> Ceilings were, however, established by the Office of Price Administration and Civilian Supply for iron and steel products, when it appeared probable that a price increase would be announced for the second quarter of 1941, and for copper, in order to bring about uniformity among the producers' price, the custom smelters' price, and the open-market price.

With regard to metals ordinarily obtained largely or entirely abroad the situation was quite different. Quicksilver was selling at about 130 percent above its pre-war level in late September 1941, owing to the need for replacing, from the production of high-cost domestic mines, the supply ordinarily obtained from Spain and Italy. Prices of Brazilian manganese and chromium ore from Rhodesia rose steadily to levels 135 and 100 percent higher, respectively, than before the war. Prices of tin, which had remained fairly stable throughout the war period, started rising suddenly in the latter part of July, reflecting speculative reaction to the mounting tension in the Pacific, and the New York quotation hit a peak of 55 cents as compared with about 49 cents in August 1939. As a result, the Office of Price Administration and Civilian Supply promptly intervened and established a price ceiling of 52 cents per pound, effective August 16, at which figure the quotation then remained.

Although the preservation of relative price stability of raw materials has kept basic metal markets on an even keel, the principal and growing problem from the point of view of national defense has been that of enlarging supply. Efforts were begun late in 1940 and have since continued to stimulate production in high-cost mines by some form of Government subsidy, particularly for copper, and the same plan may be applied to a wide range of metals. This course differs considerably from that followed during World War I, when prices were allowed to go up quite freely in order to bring out maximum production, resulting in huge profits for low-cost producers and

<sup>13</sup> However, on October 10, 1941, it was announced that a formal price ceiling would be issued for zinc, fixing maximum prices at 1 cent over the level maintained under the informal agreement. The purpose of this increase was to stimulate production. Provisions were made by the Price Administrator for the new ceiling prices to take effect immediately pending promulgation of the formal order. See Office for Emergency Management, Press Release PM 1340, October 10, 1941.

in a very broad advance in metal markets generally. The policy now being developed is designed to confine the payment of premium prices to those mines or refineries which cannot operate except on such a basis.

The inadequacy of production capacity to meet current demand, denied expression in primary markets, has had serious repercussions upon markets for secondary and scrap metals, which are by their very nature more diffuse and far more difficult to control. The first indication of this condition was a serious rise in the price of steel scrap in the fall of 1940, when quotations for most grades rose to substantially over \$20 a ton, representing an increase of about 50 percent over pre-war levels. As a result, a warning was issued by the Price Stabilization Commissioner on October 8, 1940, which had the effect of curbing the advance temporarily. Subsequently, on April 3, 1941, a ceiling was established by the Price Stabilization Division of the National Defense Advisory Commission at levels somewhat below the peaks which had been reached (see table 6), and these ceilings, with minor modifications, have since remained in effect.

In nonferrous-scrap markets, the situation was somewhat different in character. Unlike steel scrap, nonferrous scrap can frequently be used as a substitute for the virgin metal in making many kinds of articles, especially where a high degree of purity is not needed. Copper and brass scrap can be used directly in making brass products, aluminum scrap in making aluminum utensils, and so on. Consequently, fabricators who were finding increasing difficulty in obtaining supplies of the virgin metal resorted to the scrap market to obtain supplies. This condition was progressively aggravated as defense needs absorbed more and more primary metal. A mad scramble for nonferrous-metal scrap of all kinds resulted, in the course of which prices were bid up violently. Not only did this rapidly destroy the relations ordinarily existing between prices of virgin and of scrap metal, but quotations for the latter in many cases rose to levels well above those charged for the corresponding primary metal. Thus, during a period when the price of primary aluminum was actually reduced from 20 cents to 15 cents per pound by the Aluminum Co. of America, aluminum scrap was reported to have changed hands at as much as 25 cents per pound. Similar conditions prevailed in greater or less degree for zinc, copper, brass, and nickel scrap. As it became evident that conditions, if left to themselves, would get worse instead of better, a series of orders was issued by the Price Stabilization Division of the National Defense Commission, and later by the Office of Price Administration and Civilian Supply, establishing maximum prices for most of these nonferrous-scrap markets.

These efforts to control scrap-metal markets, both ferrous and nonferrous, have so far met with no more than limited success. Com-

pliance has been by no means universal and there have been many reports of both overt and concealed violations. In many cases, scrap dealers, selling at prices in excess of the fixed maxima, have insisted on making sales on a "cash and no documents" basis in order to avoid leaving records of the transaction. Various other devices for evasion have been utilized, such as shipping lower grades of scrap than those invoiced. In addition, there is considerable evidence that the establishment of ceiling prices has led to considerable disruption of the normal channels of flow, and in some cases to an actual interruption of scrap movement. Although this disruption might have been lessened by greater care and precision in drawing the original orders, some difficulty and confusion was undoubtedly a necessary consequence of any steps to control markets as scattered and complex as those for nonferrous-metal scrap, when supplies were so conspicuously inadequate to meet rapidly expanding demand.

#### PRICES OF CHEMICALS

The trend of the prices of chemicals in this war offers a contrast to that during World War I almost as striking as that just described in connection with metals. Between August 29, 1939, and September 27, 1941, the price index for chemicals and allied products, compiled by the Bureau of Labor Statistics, advanced about 19 percent, whereas between July 1914 and August 1916 the increase was 88 percent. For chemicals as such, the difference was even sharper; in the first 25 months of this war prices went up only 16 percent, as compared with 103 percent in the corresponding period of World War I. Fertilizer materials increased only 14 percent, from the time Poland was invaded to September 1941, whereas 25 years ago they had advanced 136 percent at the end of 25 months of war (table 2).

The obvious explanation of this contrast is, of course, the rapid growth of the American chemical industry since 1914. The United States is no longer largely dependent upon foreign sources for most of its synthetic chemicals, nor for such essential fertilizer ingredients as potash.

However, rapid as has been the growth of the industry, acute shortages of many key chemicals began to develop during the spring and summer of 1941. Chlorine and its products, formaldehyde, all kinds of solvents, coal-tar acids, metallic salts, and a wide range of other chemicals were being consumed at a rate substantially in excess of the capacity to produce them. To some extent this was due to direct military demand for the products affected; in other cases the shortages were secondary in character, reflecting efforts of manufacturers to find substitutes for products which they were no longer able to get. For example, the demand for formaldehyde and phenol, both used in making plastics, expanded greatly as a result of efforts to



replace metals with these plastics. In addition, the dislocation of normal channels of world trade caused many nations, particularly in Latin America, to turn to the United States for chemicals which had previously been obtained elsewhere, thus further swelling the tide of orders. Gradually, during the late summer and fall of 1941, distribution of a wide range of key chemicals was subjected to control through priorities by the Office of Production Management, and the supply not needed for direct defense production was further rationed by the Civilian Allocation Division of the Office of Price Administration and Civilian Supply (later the Civilian Allocation Division of the Office of Production Management). For example, the use of formaldehyde for making various kinds of plastic products of minor importance to civilian consumers was prohibited outright. Uses of chlorine products were carefully rationed according to their importance. By the end of September the number of chemicals subject to this kind of control was increasing rapidly.

Under these circumstances, it is evident that the chemical industry as a whole has shown considerable restraint in avoiding price advances which would have met little, if any, resistance from buyers. In fact, there were even some reductions in quoted prices for such basic chemicals as phenol and synthetic methanol. It is true that some price increases were reported to be impending at the end of September as existing contracts ran out, but most of these were not of serious proportions.

On the other hand, the acute scarcity which developed for many chemicals was seized upon in some quarters as affording an opportunity for quick and handsome profits. Brokers, whose business in this field is ordinarily quite limited, combed the market for supplies of scarce chemicals and resold such products at very wide premiums. There have been reports quoted by the Office of Price Administration of sales of formaldehyde by brokers at as high as 47 cents a pound when the price quoted by manufacturers was about 6 cents.<sup>14</sup> The number of brokers engaged in this trade has increased greatly, reflecting the opportunity to obtain exorbitant profits at little or no risk. Fortunately, the actual volume of chemicals handled through such channels seems to be quite limited. A survey conducted in September 1941 by the Bureau of Labor Statistics indicated strongly that most of the chemicals were still moving at published manufacturers' prices and through normal trade channels.

However, the disrupting effect of rising prices and such unusual selling practices became apparent, and in August and September 1941 price ceilings were issued by the Office of Price Administration for formaldehyde and ethyl alcohol (table 6) with the express aim of eliminating exorbitant resale premiums.

<sup>14</sup> U. S. Office for Emergency Management. Press release PM 981, August 21, 1941.



Although prices of most domestically produced chemicals have remained quite stable, there have been substantial advances for a number of products normally obtained in part or whole from overseas. Among the groups most affected have been botanical drugs which in September averaged 121 percent over their pre-war prices, and essential oils which rose 217 percent.<sup>15</sup> Extreme advances were recorded for belladonna leaves which were quoted at a range of \$2.40 to \$2.45 per pound at the end of September, as compared to 12 to 15 cents in August 1939, and for bergamot oil which was quoted on a nominal basis at \$20 per pound at the end of September, as compared with \$3.75 before the war. In contrast with the general market trend, most of the increases for these products occurred before rather than after February 1941.

The curtailment of imports has also been a primary factor in causing the prices of inedible oils and fats to rise 125 percent from August 1939 to September 1941. Such products as coconut oil, palm oil, palm-kernel oil, olive oil, and whale oil have become increasingly difficult to obtain. The shortage of these imported oils has caused prices of inedible domestic fats and oils, such as tallow and soybean oil, to rise correspondingly.

#### PRICES OF BUILDING MATERIALS

Prices of building materials on the average advanced somewhat less in the first 2 years of this war than in World War I—19 percent as compared with 28 percent—but the character of the increase was entirely different. Twenty-five years ago the sharpest increase by far was for structural steel which rose 128 percent in 25 months, while paint and paint materials rose about 50 percent, and cement about 20 percent. In the same period of this war, on the other hand, list prices of structural steel did not go up at all, cement advanced by only 1 percent, and paint and paint materials by 16 percent. The only sharp increases were for lumber, which rose 43 percent as compared with but 8 percent in the corresponding period 25 years ago (table 2).

The underlying reasons for this contrast are similar to those which have already been described in connection with other groups of commodity prices. Concentrated industries with limited numbers of producers, as in steel and cement manufacture, have shown a tendency to avoid price increases at this time, a restraint which was conspicuously absent in 1915 and 1916. The much more numerous and scattered lumber producers, on the other hand, raised prices quickly as demand expanded, particularly after the placing of large orders for cantonments in the summer of 1940 coincident with the largest demand for building materials for private industrial building in over a decade. (In the last war, on the other hand, there was no comparable can-

<sup>15</sup> Oil, Paint and Drug Reporter.

tonment program until 1917.) Following a series of rapid increases, prices of leading varieties of construction lumber were temporarily stabilized at the request of the Price Stabilization Commissioner—a course which was probably facilitated by the tapering off of the first cantonment program. More recently, as new orders came into the market, prices again started to advance, and the imposition of formal price ceilings by the Office of Price Administration for most kinds of lumber began with Southern pine and was in process of extension to other lumber products in the autumn of 1941 (table 6).

#### PRICES OF FINISHED CONSUMER GOODS

With the exception of farm products, the major commodity groups which have so far been described all include a variety of products at different stages of processing—raw, semimanufactured, and finished. In each case, however, the emphasis in the discussion so far has been upon standard raw materials and semifinished products.

From the point of view of the consumer, of course, what happens to the prices of raw and semifinished commodities is important primarily as it affects finished goods, with which he is immediately concerned and which constitute most of his purchases.

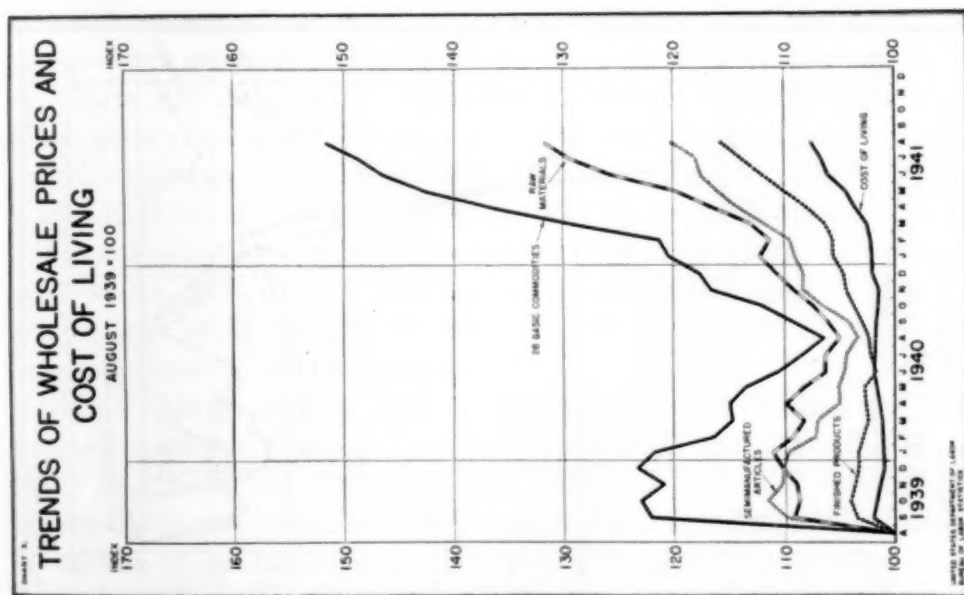
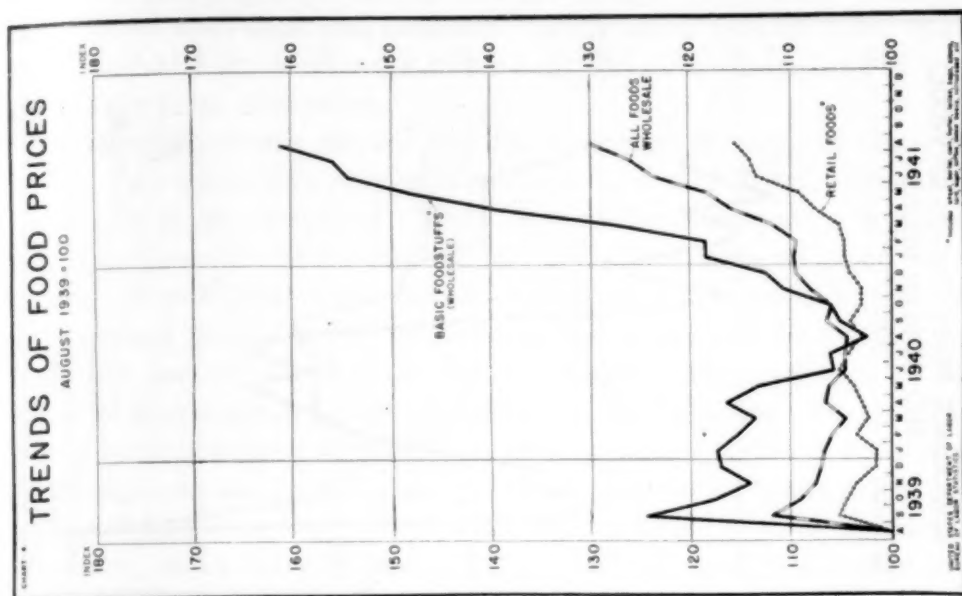
To a very great extent, of course, price changes at the finished-goods level reflect those which have occurred at earlier stages of fabrication. However, this relation is by no means direct or immediate. The time and extent to which the price of any particular finished product must be increased because of what has happened to the materials which enter into its production is influenced by a wide variety of factors. In the first place, extended periods of time are required for goods to pass through the various processes of fabrication and then to move from the manufacturer to the wholesaler and the consumer. This in turn implies a corresponding lag in translating price changes at one level to changes at later levels of manufacture and distribution. In many cases this lag is further extended by the fact that manufacturers or distributors may have contracted for substantial supplies of material at firm prices which are not subject to change during the life of these contracts.

In the second place, raw materials are only one (and often not the most important) of the elements of the cost of producing a finished article. As long as a plant is operating below its full capacity, lower unit overhead during periods of expanding production may balance increased raw-material costs in part or in whole.

Finally, changes in raw-material costs may be reflected in changes in the quality and construction of the finished article rather than in its price. This tendency is particularly prevalent for products which are customarily sold in conventional price lines, such as clothing; and it may be further accentuated by the prevalence of actual material

shortages, which make modification of design necessary regardless of cost.

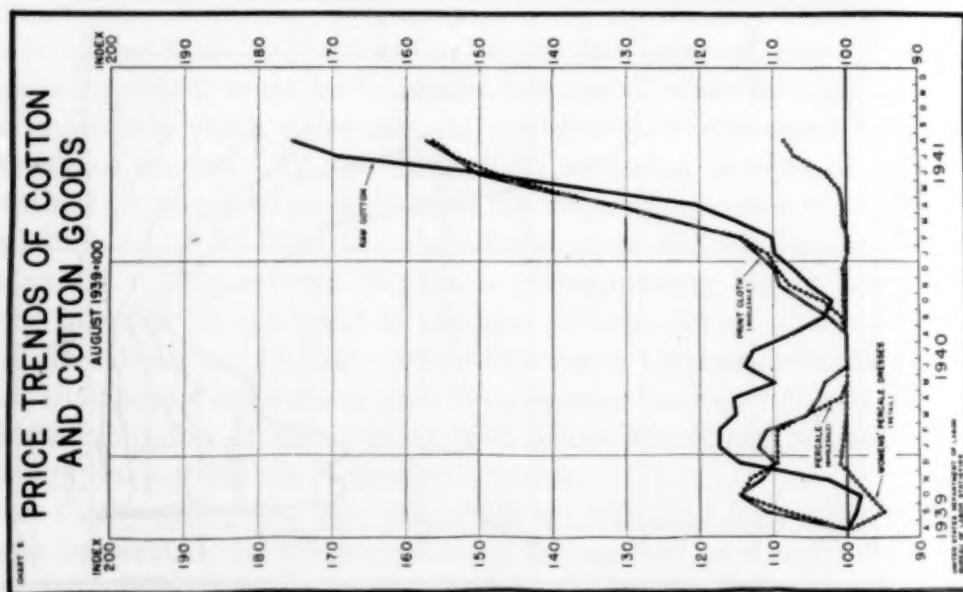
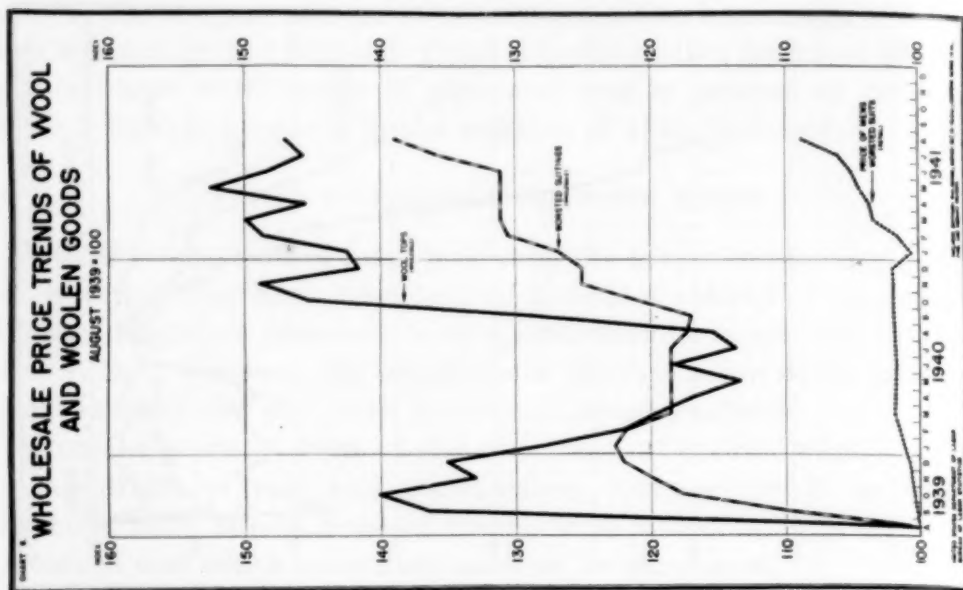
Chart 3 depicts the actual behavior of prices of commodities at different stages of production and distribution since the outbreak of



the war. It is evident that by far the sharpest increases have been recorded for basic commodities, such as wheat, cotton, and lard, most of which are traded in organized exchanges and are therefore peculiarly subject to speculation; these advanced 56 percent between August 1939 and September 30, 1941, despite the fact that 11 of these 28 products are now controlled.<sup>16</sup> Raw materials generally went up 35

<sup>16</sup> The 11 products which were controlled included sugar, hides, print cloth, silk, burlap, steel scrap (Chicago), steel scrap (Philadelphia), tin, copper, lead, and zinc.

percent during the same period. Semifinished goods have advanced more slowly, rising 21 percent, and finished goods at wholesale have risen only 17 percent. Still slower has been the rise in the general cost of living, which affords a fair measure of the trend of the price of



finished goods at retail. This last index advanced only 9 percent between August 1939 and September 1941, and about three-fourths of this increase was recorded after the middle of March 1941.

Chart 4 shows a similar comparison for a single major group of commodities—foods. The increase in prices of basic foodstuffs has been twice as great as that for all foods at wholesale, and wholesale food prices in turn have gone up twice as rapidly as those at retail.



Charts 5 and 6 trace individual commodities through the same sequence. Although the price of raw cotton went up 90 percent in the 25 months ended September 30, 1941, and the price of print cloth advanced 75 percent, the retail price of percale dresses made from this cloth had just begun to rise by the late summer of 1941. Similarly, the price of wool tops had increased much more rapidly than that of serge, and the price of serge moved up far more than that of men's suits made from this serge.

These comparisons should not be construed to suggest that price increases at successive stages of manufacture and distribution should necessarily be proportional. Only part of the discrepancy in the rate of advance can be attributed to lag in the sequence of price adjustments. A good part of the failure of finished goods prices at wholesale and at retail to rise as far as raw-material prices can be attributed to the other factors which have been described: the existence of some stocks of materials in hands of producers, the fact that other elements of cost have not risen so rapidly as raw materials, and the tendency in many markets to change quality rather than to advance price. The failure of the prices of percale dresses and men's serge suits, as shown on the charts, to advance at all until 1941, and the moderate extent of the rise which has since occurred, are at least partly due to this last factor.

Nevertheless, there has recently been a definite increase in the rate at which retail prices have been advancing and in the number of commodities affected. This acceleration is clearly evident on each of the charts just described. A further indication is afforded in table 5, which shows the trend of retail prices of various articles of clothing, housefurnishings, and fuel since June 1939. Between June 1939 and March 15, 1941, price changes for most of these products were narrow, and in some cases (e. g., silk hose, electric refrigerators, and gasoline) prices actually declined. Between March 15 and August 15, however, every single article shown in the table advanced and in many cases these increases were substantial.

Despite this growing spread of price advances to finished goods and to retail markets, there was little indication in the early fall of 1941 of any disposition on the part of the Office of Price Administration to impose many controls at these levels. This avoidance was based on a number of considerations. In the first place, the complexity of finished-goods markets and the difficulty of precisely specifying the products for which maximum prices might be set interposed a serious administrative obstacle. The great number of buyers and sellers operating in these markets, both at wholesale and even more at retail, was considered to make effective enforcement difficult. Moreover, it seemed probable that the intense competition ordinarily prevailing in finished-goods markets and between retail stores would suffice to prevent any serious profiteering.

TABLE 5.—Change in Retail Prices of Consumer Goods, June 15, 1939, to August 15, 1941

Articles	Percent of increase from—		
	June 15, 1939, to Sept. 15, 1940	June 15, 1939, to Mar. 15, 1941	June 15, 1939, to Aug. 15, 1941
Clothing, men's:			
Hats, felt.....	1.0	5.4	6.8
Overalls.....	4.1	6.4	18.0
Shirts, work.....	3.2	5.0	15.5
Trousers, work.....	2.1	3.7	11.2
Shoes, work.....	3.3	3.8	10.4
Shoes, street.....	4.3	5.0	9.4
Suits, wool.....	2.0	3.5	8.8
Undershirts.....	<sup>1</sup> 1.1	.5	10.6
Clothing, women's:			
Dresses, percale.....	.2	.6	8.5
Hose, silk.....	.4	1.2	1.5
Slips, rayon silk.....	5.7	6.2	10.4
Shoes.....	.5	.4	2.4
Housefurnishings:			
Suites, living room.....	3.6	8.1	24.3
Suites, bedroom.....	1.2	4.6	14.4
Washing machines.....	.4	2.5	11.0
Electric refrigerators.....	<sup>1</sup> 14.3	<sup>1</sup> 15.6	<sup>1</sup> 10.7
Sheets.....	2.5	7.2	12.6
Mattresses.....	.3	2.2	8.1
Rugs.....	14.8	15.8	22.7
Linoleum, felt base.....	<sup>1</sup> 1.7	<sup>1</sup> 1.4	<sup>1</sup> 1.7
Fuel:			
Pennsylvania anthracite.....	6.7	9.0	13.3
East bituminous.....	4.5	9.4	17.4
Gasoline.....	<sup>1</sup> 1.1	<sup>1</sup> 1.9	6.6

<sup>1</sup> Decrease.

Accordingly, the Office of Price Administration has largely concentrated its efforts upon prices of standard raw materials and semi-finished goods. This has been done in the belief that, if prices of these products are prevented from rising rapidly, finished-goods markets will not get out of hand. At the same time, the Consumer Division of the Office of Price Administration has held numerous conferences with retailers for the purpose of preserving sound mark-up policies, and it has also sought to develop programs for achieving economies in the production of finished goods through simplification and standardization of styles. The Office of Production Management has also participated in the effort to economize through simplification. If programs of this sort achieve adequate cooperation, they may avert the extreme administrative difficulties inherent in direct retail price controls.

### Individual Price-Ceiling Orders

In table 6 are given the various price-ceiling orders issued by the Price Stabilization Division of the Advisory Commission to the Council of National Defense, the Office of Price Administration and Civilian Supply, and the Office of Price Administration.

TABLE 6.—Price-Ceiling Orders Issued Through September 1941

Price Stabilization Division, Advisory Commission to Council of National Defense

Price ceiling number	Date	Commodity	Action
No. 1.....	1941 Feb. 17	Machine tools.....	Ceiling price set on machine tools based on percentages of list prices of new tools; dealers to report on second-hand tools in stock; monthly reports of purchases required; new tool makers requested to make notice of proposed advances in prices.
No. 2.....	Mar. 3	Aluminum scrap.....	Ceiling of 11 cents per pound set on mixed aluminum scrap sold by airplane manufacturers.
No. 3.....	Mar. 31	Zinc scrap.....	Ceiling prices set for zinc scrap and secondary slab, and dealers required to submit complete record of sales and purchases.
No. 4.....	Apr. 3	Iron and steel scrap.....	Ceiling prices set on iron and steel scrap, based on \$20 per ton for No. 1 heavy melted scrap at Pittsburgh.
No. 5.....	Apr. 2	Bituminous coal.....	Ceiling prices set for bituminous coal, freezing prices as of March 28 for duration of coal strike and revoke May 1.
Office of Price Administration and Civilian Supply			
No. 6.....	1941 Apr. 17	Steel.....	Prices of ingots, semifinished and finished steel products frozen at levels prevailing during the first quarter of 1941.
No. 7.....	May 24	Combed cotton yarn.....	Ceiling price set on various grades of combed cotton yarns, used primarily in manufacture of textiles, underwear, hosiery, and other apparel requiring high-grade yarn.
No. 8.....	June 2	Nickel scrap.....	Ceiling prices set for wide variety of scrap and secondary materials containing nickel.
No. 9.....	June 16	Hides, kip, and calf skins...	Ceiling prices set on all purchases and sales of domestic hides, kips, and calf skins, including transactions in futures on commodity exchange.
No. 10.....	June 24	Pig iron.....	Ceiling prices set for all types of pig iron.
No. 11.....	June 28	Cotton cloth (gray goods)...	Ceiling prices set for 6 leading types of cotton cloth: Print cloth, carded broadcloth, tobacco cloth, sheetings, waste osnaburgs, and combed broadcloths.
No. 12.....	July 22	Brass-mill scrap.....	Ceiling prices set on all principal kinds of brass-mill scrap.
No. 13.....	Aug. 1	Douglas-fir plywood and peeler logs.	Ceiling prices set for Douglas-fir plywood and for Douglas-fir peeler logs from which plywood is made.
No. 14.....	Aug. 2	Raw silk and silk waste.....	Ceiling prices set on principal grades of raw silk and silk waste based on quotations that prevailed on July 21, 1941.
No. 15.....	Aug. 12	Copper.....	Ceiling price of 12 cents per pound set for electrolytic copper.
No. 16.....	do.....	Sugar.....	Ceiling price set of \$3.50 per pound on 96° raw sugars, duty paid, New York (price prevailing in mid-July).
No. 17.....	Aug. 15	Tin.....	Ceiling price of 52 cents a pound set on "Grade A" pig tin.
No. 18.....	Aug. 16	Burlap.....	Ceiling prices for burlap bags and other types of burlap set at levels about 20 percent below recent quotations in New York spot market.
No. 19.....	do.....	Southern-pine lumber.....	Ceiling prices on Southern-pine lumber set at about \$3 per 1,000 board feet under recent high levels.
No. 20.....	Aug. 19	Copper scrap.....	Price differentials set at from 2 to 4 cents below 12-cent copper, and uniform dealers' margin established of ¾ cent per pound for collecting, sorting, etc.
No. 21.....	Aug. 20	Formaldehyde.....	Ceiling prices set on formaldehyde, reducing dealers' premium charges totaling as much as 47 cents a pound against manufacturers' prices of 6 cents per pound for comparable quantities.
No. 22.....	Aug. 23	Pennsylvania-grade crude oil.	Ceiling prices set for Pennsylvania-grade crude oil, restoring them to levels prevailing before recent 23-25 cent increase.
No. 23.....	Aug. 24	Rayon gray goods.....	Ceiling prices for most important types of rayon gray goods set at about 10 percent below recent levels.
No. 24.....	Aug. 26	Animal hair.....	Ceiling prices set on domestic washed cattle tail hair and processed winter hog hair and coil dried hog hair.

TABLE 6.—Price-Ceiling Orders Issued Through September 1941—Continued

Office of Price Administration

Price ceiling number	Date	Commodity	Action
No. 25....	1941 Aug. 29	Fats and oils.....	Four corrective measures adopted to eliminate speculative practices: (1) Speculative purchases for resale prohibited; (2) deliveries against future purchases to be completed within 45 days of commitment; (3) guaranties by sellers against future declines eliminated; (4) circulation of fictitious price quotations prohibited.
No. 26....	Sept. 11	Douglas-fir lumber.....	Ceiling prices on Douglas-fir lumber set at an average of \$10 per 1,000 board feet below prevailing levels.
No. 27....	Sept. 12	Anthracite.....	An emergency price schedule issued in order to block 15-cent per ton increase which producers of Pennsylvania anthracite proposed to put into effect Sept. 15.
No. 28....	Sept. 17	Ethyl alcohol.....	Ceiling prices set on 12 leading classifications.
No. 29....	Sept. 19	Coke.....	Prices for byproduct foundry coke and byproduct furnace coke, used in manufacture of iron and steel products, frozen at about current levels.
No. 30....	Sept. 20	Waste paper.....	Ceiling prices set for all grades of waste paper sold in area east of Rocky Mountains.



## WAGES AND COST OF LIVING IN TWO WORLD WARS

By WITT BOWDEN, *Bureau of Labor Statistics*

IN THE World War beginning on July 28, 1914, the comparative movements of wages and cost of living had vital bearing on industrial relations, public policies, the adaptation of the economy to wartime needs, and the nature of post-war readjustments. Events and problems of the war beginning on September 1, 1939, suggest comparisons with the earlier period.

### *Summary*

The increases in wages in the first 2 years of the present war have been described as being more rapid than the increases in the first 2 years of the first World War. This is true of average weekly earnings in manufacturing but not of hourly earnings and rates of pay.

The increase in average weekly earnings in manufacturing from June 1914 to June 1916 was 15.1 percent, and this was almost the same as the rise that occurred in average hourly earnings (15.0 percent) in the corresponding later period. It is known that in the earlier period hours of work declined significantly. Therefore, the increase in average hourly earnings in manufacturing must have been greater than the rise in average weekly earnings in the same period (15.1 percent), and greater, also, than the increase (15.0 percent) in average hourly earnings from June 1939 to June 1941.

In steam railroads, hourly earnings averaged 9 percent higher in the year ended June 1916 than in the year ended June 1914; whereas in the corresponding years of the present war, the increase was only about 1 percent. Other information, although somewhat fragmentary for the earlier period, tends to confirm the view that hourly earnings and rates of pay increased by higher percentages during the first 2 years of the first World War than in the corresponding later period. Significant increases occurred in almost all sections of the country but most extensively in the East and Middle West, as is indicated, for example, by changes in rates of pay of street railway and bus employees in 109 cities and towns throughout the country.

The reduction in hours of work accompanying the increases in rates of pay may be illustrated by the machine trades. In the latter part of 1915, the machinists initiated a move for an 8-hour day. The movement spread rapidly to other occupations. The result was an extensive reduction of the working week from 55 or more hours to 48 hours, with no reductions in weekly earnings and with some increases. This change was equivalent to an increase of 14.6 percent in hourly rates of pay in the latter part of 1915. Neither the reductions in hours nor the increases in rates of pay were limited to this period.

The increase in cost of living from June 1914 to June 1916 was 8.9 percent. In June 1941, the increase over June 1939 was 6.1 percent. It is not possible to make a satisfactory adjustment of hourly earnings for the earlier period to take account of the rise in prices, because of the fragmentary nature of the wage data, but the evidence indicates that hourly earnings, with important exceptions, increased more rapidly than cost of living in the earlier as well as the later period.

Increases in rates of pay have sometimes been viewed as equivalent to increases in labor cost, but changes in the amount of wages paid per unit produced depend partly on changes in the productivity of labor. Changes in output per man-hour and in labor cost per unit of output in the first World War cannot be analyzed satisfactorily, although it is known that industry was then comparatively slow and inelastic in adopting technological improvements. In the period from June 1939 to June 1941, the increase of 15.0 percent in average hourly earnings was accompanied by an increase of only 6.9 percent in the amount of wages paid per unit produced. In contrast, wholesale prices of manufactured products rose 11.3 percent, and of semimanufactured articles, 18.2 percent.

Average weekly earnings in manufacturing industries increased 15.1 percent during the 2-year period ended June 1916, and 31.8 percent in the corresponding period of the present war. In terms of the amount the average worker in manufacturing industries could buy with his weekly wage, there was an increase in the earlier period of 5.7 percent, and in the later period of 24.2 percent.

This contrast is to be explained not by a greater increase in rates of pay in the later period but rather by a larger amount of overtime paid for at overtime rates and by a lengthening of hours in contrast to a reduction of hours in the earlier period. Prevailing hours of work in manufacturing, as indicated by reports to the Bureau of the Census, were 55.5 per week in 1914 and only 51.3 in 1919, in spite of the intensified demand for labor after the entry of the United States into the World War. A significant part of the reduction in hours occurred before June 1916, as is indicated by reports for the machine trades, referred to above, and by various other reports. In contrast, there was a rise in average hours of work per week from June 1939 to June 1941 of 10.7 percent in manufacturing industries, and in some employments, notably some of the mining industries, the increases were much larger.

Weekly earnings in the early part of the first World War were determined, so far as rates of pay were concerned, almost wholly by straight-time rates. In the present war, overtime at extra rates has had a significant effect on weekly earnings. In important defense industries covered by special surveys for March 1941, the proportion of workers who were working overtime ranged from 18 percent in

smelting and refining to 95 percent in the machine-tool industry. The average weekly amount of overtime per overtime worker ranged from 6.1 hours in smelting and refining to 13.8 hours in machine-tool accessories. Overtime was increased by the fact that in June 1939 the individual worker could be employed 44 hours per week at straight-time rates, and in June 1941, only 40 hours.

Increases in overtime paid for at premium rates occurred in both low-wage and high-wage industries but mainly in the latter, such as iron and steel, machine tools, and shipbuilding. It was in such industries, also, that the greatest expansion of employment occurred. Average hours of work in all manufacturing industries combined rose 10.7 percent from June 1939 to June 1941, and employment in terms of total hours worked increased 47 percent. In shipbuilding, to cite an illustration of expanding high-wage industries, weekly hours rose 17.4 percent and total hours worked more than tripled.

A significant study of overtime indicated that the cost of overtime even at one and a half times the straight-time rate is more than counterbalanced by the increased utilization of plant facilities and the accompanying absorption of fixed overhead expenses in a larger volume of production.

In both the present period and the first World War, wholesale prices outran cost of living by wide margins. In contrast to the 26.3-percent rise in wholesale prices by August 1916 was the increase of only 10.1 percent in cost of living; and in contrast to the 19.4-percent rise in wholesale prices by August 1941 was the increase of only 7.5 percent in cost of living. Later, however, in the World War period, cost of living rose more rapidly than wholesale prices. In December 1923, cost of living was 73.9 percent above June 1914, and the level of wholesale prices only 45.5 percent higher. Thus, the violent price changes of the war and post-war periods raised prices generally much above pre-war levels; but when comparative stabilization was reached, the rise of prices affecting the cost of living was much greater than the advance of wholesale prices.

Workers in employments with lagging wages or in areas with exceptional increases in cost of living suffered reductions in buying power in the World War period. But the average worker in manufacturing industries could buy more with his weekly wage during most of the World War and especially thereafter than before the war. In the period of post-war adjustment there was a much greater rise in labor productivity than in real wages. Weekly earnings in manufacturing adjusted by the cost-of-living index rose 10 percent between June 1914 and the year 1919, and another 10 percent between 1919 and 1923; and hourly earnings adjusted rose 11 percent between 1919 and 1923, in contrast to a rise of 31 percent in output per man-hour.



The preceding paragraphs give a summary analysis. A more detailed discussion follows, with tabulations and graphic presentation of the trends.

### *Hourly Earnings*

Information regarding wage rates and average hourly earnings is fragmentary for the World War period, but the available information, when paralleled by comparable data for the same period during the present war, affords significant indications of relative change.<sup>1</sup> The percentage rise in average hourly earnings seems to have been greater from June 1914 to June 1916 than in the corresponding months from 1939 to 1941.

#### MANUFACTURING INDUSTRIES

In manufacturing industries as a whole, average weekly earnings rose 15 percent from June 1914 to June 1916 (table 1). If there had been no change in average weekly hours, average hourly earnings also would have risen about 15 percent. It is known, however, that there was a significant reduction in hours of work, as will be pointed out later, and average hourly earnings therefore increased more than 15 percent. The increase in average hourly earnings from June 1939 to June 1941 was 15 percent and was therefore less than the rise between the corresponding months of the earlier period, but the difference cannot be measured with exactness.

The rise in hourly earnings from 1914 to 1916 was caused almost entirely by increases in straight-time rates of pay because there was comparatively little payment of overtime rates during this period. In contrast, the increase in average hourly earnings in 1939-41 was in a significant degree a result of the increases in the proportion of overtime work paid for at overtime rates and in the percentage of employment in high-wage industries and occupations.

*Boot and shoe industry.*—Between February 1914 and February 1916, average hourly earnings in the manufacture of boots and shoes increased about 7 percent, rising from 24.3 to 25.9 cents. The increase between February 1939 and February 1941 was 9 percent, the average rising from 49.6 to 54.0 cents.<sup>2</sup>

The increase in average hourly earnings in boots and shoes from 25.9 cents in February 1916 to 54.0 cents in February 1941 is similar to the increases in other industries during this period. The rise in earnings was in part counteracted by the accompanying rise in cost of living, which was about 35 percent higher in February 1941 than in February

<sup>1</sup> Outstanding sources of information for the earlier period are reports of special studies in a limited number of industries made by the Bureau of Labor Statistics; the Bureau's reports of annual surveys of union wages and hours of work; monthly reports of employment and pay rolls by the same agency and by the New York State Department of Labor; and the wage statistics of the Interstate Commerce Commission.

<sup>2</sup> Information regarding the first period is to be found in Bureau of Labor Statistics Bulletins No. 178 (p. 7), and No. 450 (p. 2). The general sources of average hourly earnings data for the later period are the monthly reports of the Bureau of Labor Statistics, published in the Monthly Labor Review and in the monthly pamphlet on Employment and Pay Rolls.



1916. There was nevertheless a large net gain in average hourly earnings when adjusted by the cost-of-living index. The general advance in real hourly earnings was accompanied by an even greater rise in labor productivity as measured by man-hour output.<sup>3</sup>

*Cotton goods industry.*—In the cotton goods industry, average hourly earnings increased 17 percent between May 1914 and approximately the same period in 1916, the increase being from 15.3 to 17.9 cents.<sup>4</sup> Between May 1939 and May 1941, the increase was also 17 percent (from 38.6 to 45.1 cents).

*Woolen and worsted goods industry.*—Hourly earnings in woolen and worsted goods rose 24 percent between May 1914 and the spring of 1916, the advance being from 18.2 to 22.5 cents.<sup>5</sup> Between May 1939 and May 1941, there was a rise of only 19 percent, the increase being from 52.6 to 62.8 cents.

*Blast furnaces, steel works, and rolling mills.*—Information relating to average hourly earnings in blast furnaces, steel works, and rolling mills is available only for approximately the first year of the World War, namely, from May 1914 to May 1915. Special studies made in these years indicate no significant change, the averages being estimated as 30.1 cents for May 1914 and 29.7 cents for May 1915.<sup>6</sup> Hourly earnings from current monthly reports to the Bureau of Labor Statistics similarly indicate no significant change from May 1939 (83.5 cents) to May 1940 (84.2 cents).

#### STEAM RAILROADS

Hourly earnings on steam railroads rose much more in the early part of the World War than in the corresponding period of the present war. Hourly earnings in the year ended June 30, 1916, averaged 9 percent higher than in the year ended June 30, 1914. The increase between June 1914 and June 1916 was undoubtedly much greater than the increase shown for the two annual averages. The average for the year ended June 30, 1941, was only about 1 percent higher than the average for the year ended June 30, 1939.<sup>7</sup>

Railroad workers had been attempting in 1913 to secure increases in wages, and these efforts led to the Newlands Act, approved July 13, 1913, creating machinery for mediation and conciliation. De-

<sup>3</sup> For a discussion of this subject, see *Monthly Labor Review*, September 1940 (pp. 523-531): *Wages, Hours, and Productivity of Industrial Labor, 1909 to 1939*, by Witt Bowden (reprinted as Serial No. R. 1150).

<sup>4</sup> Bureau of Labor Statistics Bulletins No. 190 (p. 6), and No. 446 (p. 6).

<sup>5</sup> Bureau of Labor Statistics Bulletins No. 190 (p. 6), and No. 443 (p. 7).

<sup>6</sup> Bureau of Labor Statistics Bulletins No. 353 (p. 1), and No. 442 (p. 3).

<sup>7</sup> The figures for the earlier period are computed from Interstate Commerce Commission data of total compensation and hours worked or hours on duty and they cover all employees paid on an hourly basis. The average for the year ended June 30, 1914, was 24.6 cents, and for the year ended June 30, 1916, 26.7 cents. The figures for the later years were derived from the number of "hours paid for," as defined by the Interstate Commerce Commission, differing slightly from the "hours worked" in the Commission's later wage statistics. The average for the year ended June 30, 1939, was 70.5 cents, and for the year ended June 30, 1941, 71.3 cents. The coverage, as to types of employees included, is approximately the same in the earlier and later periods.

mands by various groups of railroad workers for wage increases came before the newly created Board of Mediation and Conciliation, the first award being handed down in September 1913. These proceedings account in part for the increase in the average of hourly earnings received by railroad workers during the first 2 years of the World War. Increases naturally were not limited to those obtained by arbitration; and the arbitrations themselves gave an impetus to wage increases for workers other than those directly affected.<sup>8</sup>

#### UNION RATES OF PAY

Union rates in the building trades were 4.0 percent higher on May 15, 1916, than on May 15, 1914. Union rates on June 1, 1941, were 5.3 percent higher than on June 1, 1939; and average hourly earnings in private building construction were 5.5 percent higher in May 1941 than in May 1939. Union rates of book and job printers rose 2.0 percent from 1914 to 1916, and average hourly earnings between May 1939 and May 1941 rose 2.1 percent. In the earlier period, union rates in newspapers and periodicals rose 1.1 percent and in the later period hourly earnings rose 6.5 percent. Union rates of bakers in the earlier period rose 5 percent and hourly earnings in bakeries in the later period rose 7 percent.<sup>9</sup>

Reports of union rates of wages per hour in 1914-16 covered 20 occupations in breweries, bottling houses, and soft-drink establishments. The wages of these workers are roughly comparable to the hourly earnings of employees in the beverages industry (malt liquors and soft drinks) during the years 1939 to 1941. Average hourly earnings in this industry increased 5 percent between May 1939 and May 1941. The union rates of pay in 10 of the 20 occupations covered during the years 1914 to 1916 increased more than did hourly earnings in the beverages industry during the later period; the rates of workers in 5 of the 20 occupations increased by the same percentage; and the rates of workers in only 5 of the 20 occupations increased by a smaller percentage.<sup>10</sup>

#### STREET RAILWAYS AND BUSES

Wage data for street railways and busses for the two periods of warfare afford evidence of relatively rapid increases in the earlier period. Information for the period of the first World War is mainly in wage agreements. These agreements were made at various dates

<sup>8</sup> United States Board of Mediation and Conciliation. Report on the Effects of Arbitration Proceedings upon Rates of Pay and Working Conditions of Railroad Employees, by W. Jett Lauck. (S. Doc. No. 493 64th Cong., 1st sess., Washington, 1916.) The awards under the Newlands Act of 1913 and the Erdman Act of 1898 are summarized on pages 14-19.

<sup>9</sup> Union rates for the earlier period are given in the Monthly Labor Review, November 1940 (pp. 1221-1250), or Serial No. R. 1220; December 1940 (pp. 1471-1502), or Serial No. R. 1236; and (for bakers) Bulletin No. 325 (p. 13).

<sup>10</sup> Bureau of Labor Statistics Bulletin No. 245 (pp. 16, 21).

in different cities, but wage changes in 1914 seem to have been slight and in 1939 were insignificant.

Hourly earnings of workers on street railways and busses in June 1939 averaged 71.1 cents and in June 1941, 74.5 cents, an increase of 4.8 percent over the average for June 1939. There are no comprehensive figures of the average earnings of these types of workers during the World War, but extensive reports are available from all sections of the country, giving wage changes in collective agreements between unions and employers. Tabulations of data cover 109 cities.<sup>11</sup> Two series of wages are given, namely, the hourly rate at starting and the maximum hourly rate; and when differences exist in the rates for motormen and conductors, separate series for these workers are given. The figures are not averages for the year but are the rates embodied in the latest agreement or change. These reports indicate a significantly larger increase in the earnings of streetcar motormen and conductors between 1914 and 1916 than the increase (about 5 percent) in the earnings of streetcar and bus workers between 1939 and June 1941.

In Boston, the increases between 1914 and 1916 were as follows: For motormen and conductors on surface lines, 8.5 percent; for motormen on elevated lines, 10.3 percent; and for conductors on elevated lines, 10.0 percent. There was no change recorded for motormen on the Brooklyn Rapid Transit elevated lines, but the conductors of these lines obtained a 13-percent increase in rates. The increases in the rates of the other New York and Brooklyn motormen and conductors ranged from 4.0 to 8.3 percent. In Chicago, the increases recorded ranged from 16.0 to 24.6 percent. In Omaha, the average increase recorded was 4.2 percent, and in New Orleans, 2.1 percent. In Atlanta and in San Francisco, no increases were reported.

These seven cities were the largest cities in the seven geographic divisions as classified by the Bureau of the Census. The collective agreements of 1916 provided for increases over those of 1914, both in the beginning hourly rate and in the maximum hourly rate in 97 of the 109 cities, and there were increases in at least one of the two rates in 101 of the 109 cities. The Rocky Mountain and Pacific States had a high proportion of the cities that showed no increases between 1914 and 1916, 6 of these 12 cities being situated in these States, although only 10 of the total of 109 cities were there.

There were significant increases in most of the smaller towns as well as in the larger cities, especially in the eastern and middle western

<sup>11</sup> Hanna, Hugh S., and Lauck, W. Jett: *Wages and the War—A Summary of Recent Wage Movements* (pp. 319-337), Cleveland, 1918. The sources used in this compilation were the *Motorman and Conductor*, official journal of the Amalgamated Association of Street and Electric Railway Employees, and the *Electric Railway Journal*. A few sources other than collective agreements were used. The figures of wages obtained from collective agreements published in these journals conform substantially, for the same period, to the figures collected by the Bureau of Labor Statistics for the latter part of 1914 and the early part of 1915 and published in the Bureau's Bulletin No. 204: *Street Railway Employment in the United States*.



sections of the country. Five of the 109 towns had less than 10,000 population in 1910, and in these 5 there were increases between 1914 and 1916 both in the rate at starting and in the maximum rate, with one exception (Niles, Ohio), and in this town there was an increase of 8.1 percent in the maximum hourly rate, which became effective after 3 years of service and therefore presumably applied to most of the employees. The increases in these five towns ranged from 8.0 percent in the maximum rate in Montpelier, Vt., to 18.2 percent in the starting rate in Lansford, Pa.

#### FARM WAGE RATES

Estimates of farm wage rates for the World War period are available for years only, not for months, and with such limitations as to make comparisons with current farm wage rates rough approximations. There appears to have been no significant change between 1914 and 1915, but a rapid upturn was apparent in 1916. Similarly, the change was slight in 1940 and much more rapid in 1941. Current quarterly figures indicate, indeed, a more rapid rise in 1941 than in 1916.

The unusually rapid upturn in farm wage rates in 1941 followed a period during which farm wages had lagged significantly behind industrial wages. Farm wage rates in 1940 were only 24 percent higher than in 1914, in contrast to increases of 125 percent in weekly earnings and 200 percent in hourly earnings in manufacturing industries. This lag in farm wage rates was particularly striking in the years from 1929 to 1940. The exceptionally rapid rise in farm wage rates in 1941 thus reflected in part the general upward movement of wages and in part a tendency to overcome the lag in response to the pressure of competition for the services of farm workers.

#### MACHINE TRADES

There is indirect evidence of a rapid rise in 1915 and 1916 of rates of pay in the machine trades. Extensive reports of reductions of hours include 124 firms (a partial list, mainly in the East but to some extent in the Middle West as far as Chicago and Milwaukee) that adopted the 8-hour day, the reductions in most cases being from 55 hours or even more to 48 hours per week. Numerous other firms were reported as reducing hours extensively but not to a straight 8-hour basis. It was further reported that, in practically all cases of reductions of hours, no reduction was made in weekly wages and in many cases the weekly wage was increased.<sup>12</sup>

The shortening of the working week from 55 to 48 hours, with no reductions in weekly earnings, required an increase of 14.6 percent in hourly rates of pay. This increase occurred during a part of the period from June 1914 to June 1916. The movement for the 8-hour day in

<sup>12</sup> See *Monthly Labor Review* for October 1915 (pp. 17-18): Movement for Reduction of Hours of Labor in the Machine Trades; and February 1916 (pp. 37-38): Reduction of Hours of Labor in the Machine Trades.



the machine trades got under way, it is reported, in the late summer of 1915, and the reductions of hours, with accompanying increases in rates of pay, as described in the sources here cited, occurred in the latter part of the year 1915. It is known that in 1916 the movement for wage increases gained momentum.

#### HOURLY EARNINGS AND COST OF LIVING

The increase in cost of living between June 1914 and June 1916 was somewhat less than the increase in hourly earnings. It is true, of course, that the increases both in cost of living and in hourly earnings were far from uniform, so that in some employments and in some areas there was a net loss in hourly earnings when the rise in cost of living was taken into account. The index of cost of living for June 1916 was 8.9 percent higher than for June 1914, with rapid increases beginning in August 1916. The trend in cost of living between June 1939 and June 1941 was not significantly different from the trend between the corresponding months of the World War period, but the rise was somewhat smaller, the index for June 1941 being 6.1 percent higher than for June 1939. Nevertheless, the comparatively large increase in average hourly earnings in the earlier period seems to have resulted in a somewhat larger increase in real earnings per hour in this period than from June 1939 to June 1941. Changes in cost of living as affecting living standards are, however, more important in their effect on weekly earnings (described later) than in relation to hourly earnings.

#### HOURLY EARNINGS, LABOR COST, AND PRICES

The recent rise in average hourly earnings was accompanied by a much smaller increase in labor cost. The amount of wages paid per unit produced depends on various factors in addition to rates of pay, notably on volume of production and technological adaptability. It is known that industry during the first World War was comparatively slow and inelastic in adopting technological improvements, but statistics of wages and of production for that period do not reveal adequately the relationship between hourly earnings and labor cost. Information available for the period of the present war makes possible a much more significant analysis.

Average hourly earnings in manufacturing industries were 15.0 percent higher in June 1941 than in June 1939, but the amount of wages paid per unit produced was only 6.9 percent higher. The productivity of labor had in the meantime increased to such an extent as to counterbalance in considerable part the effect of the increase in hourly earnings.

Although the rise in the amount of wages paid per unit of output in manufacturing industries was only 6.9 percent higher in June 1941

than in June 1939, wholesale prices of manufactured products were 11.3 percent higher, and wholesale prices of semimanufactured articles were 18.2 percent higher. It is apparent that factors other than changes in labor cost were operating to raise the level of wholesale prices.

### *Weekly Earnings*

Average weekly earnings increased from June 1939 to June 1941 to a considerably greater extent than in the corresponding months of the years 1914 to 1916. In June 1941 weekly earnings in manufacturing industries as a whole were 31.8 percent higher than in June 1939, as compared to a rise of 15.1 percent between June 1914 and June 1916. The increase is less marked in both periods when the cost of living is taken into account, but since the index of cost of living rose approximately at the same rate in the two periods, the rise in real weekly earnings as well as money earnings was much greater in the later than in the earlier period. This relatively rapid rise in the later period was mainly a result, not of a greater increase in rates of pay, but rather of a larger amount of overtime paid for at overtime rates and a lengthening of hours in contrast to a reduction of hours in the earlier period.

#### WEEKLY EARNINGS IN MANUFACTURING INDUSTRIES

In June 1914 weekly earnings in manufacturing industries averaged \$11.62. There was no significant change before the fall of 1915, when, for the first time, the average rose above \$12. The first year of the World War was marked by uncertainties and fluctuations in employment, which in turn entailed a variable amount of part time. After September 1915, however, the weekly earnings trend was upward, with few exceptions, and in June 1916 the manufacturing average was 15 percent higher than in June 1914.<sup>13</sup>

Weekly earnings were higher than in June 1939 throughout the succeeding 2-year period, with the single exception of July 1939. There were significant variations, but the upward trend, except for reversals in the earlier months of 1940, was consistently maintained. (See table 1 and the accompanying chart.)

From July 1914 to September 1915, weekly earnings in manufacturing industries, after adjustment by the cost-of-living index, were consistently lower than in June 1914. The lowest point was in October 1914, when real weekly earnings fell 5.7 percent below June 1914. The decline in real earnings resulted partly from a slight rise in cost of living and partly from irregular employment attending the uncertainties of the early months of the war. In October 1915, the index of real weekly earnings was 1.4 percent higher than in June 1914, and in June 1916, 5.7 percent higher.

<sup>13</sup> For the sources and methods used in computing average weekly earnings, see table 5, footnote 1.

# AVERAGE WEEKLY EARNINGS IN MANUFACTURING, 1914-23 AND 1939-41 AVERAGE WEEKLY EARNINGS IN MANUFACTURING



## AVERAGE WEEKLY EARNINGS ADJUSTED BY COST OF LIVING INDEX



UNITED STATES DEPARTMENT OF LABOR  
BUREAU OF LABOR STATISTICS

TABLE 1.—Average Weekly Earnings in All Manufacturing Industries Combined, and Indexes of Earnings Adjusted by Cost-of-Living Indexes, June 1914 to August 1916 and June 1939 to August 1941

Month	Average weekly earnings					
	Amount		Indexes		Indexes adjusted by cost-of-living indexes	
	Earlier period <sup>1</sup>	Later period	Earlier period (June 1914=100)	Later period (June 1939=100)	Earlier period (June 1914=100)	Later period (June 1939=100)
	1914	1939	1914	1939	1914	1939
June.....	\$11.62	\$24.17	100.0	100.0	100.0	100.0
July.....	11.47	23.64	98.7	97.8	97.7	97.5
August.....	11.46	24.52	98.6	101.4	96.2	101.4
September.....	11.41	24.70	98.2	102.2	95.3	100.2
October.....	11.21	25.81	96.5	106.8	94.3	105.0
November.....	11.27	25.73	97.0	106.5	94.7	104.9
December.....	11.49	26.26	98.9	108.6	96.7	107.5
	1915	1940	1915	1940	1915	1940
January.....	\$11.38	\$25.51	97.9	105.5	96.2	104.6
February.....	11.35	25.20	97.7	104.3	96.4	102.8
March.....	11.57	25.46	99.6	105.3	99.2	104.1
April.....	11.47	25.33	98.7	104.8	97.7	103.5
May.....	11.65	25.43	100.3	105.2	98.9	103.6
June.....	11.72	25.79	100.9	106.7	99.2	104.7
July.....	11.58	25.25	99.7	104.5	98.0	102.8
August.....	11.79	26.10	101.5	108.0	99.7	106.5
September.....	11.76	26.54	101.2	109.8	98.9	107.9
October.....	12.16	27.13	104.6	112.2	101.4	110.4
November.....	12.20	26.93	105.0	111.4	101.2	109.8
December.....	12.44	27.89	107.1	115.4	102.8	113.0
	1916	1941	1916	1941	1916	1941
January.....	\$11.72	\$27.74	100.9	114.8	95.9	112.3
February.....	12.66	28.58	109.0	118.2	103.4	115.7
March.....	12.88	29.11	110.8	120.4	104.4	117.3
April.....	12.89	29.17	110.9	120.7	103.6	116.4
May.....	13.34	30.78	114.8	127.3	106.7	121.9
June.....	13.37	31.85	115.1	131.8	105.7	124.2
July.....	12.52	31.20	107.7	129.1	98.9	121.0
August.....	13.03	31.65	112.1	130.9	101.8	121.8

<sup>1</sup> Computed from data collected by the U. S. Bureau of Labor Statistics and the New York State Department of Labor. For methods used, see table 5, footnote 1.

In the later period, the index of average weekly earnings in manufacturing industries, after adjustment by the cost-of-living index, was consistently above the June 1939 level, with the exception of July 1939, and in June 1941 the adjusted index was 24.2 percent higher.

The cause of the comparatively large increase in weekly earnings in the later period is to be found in factors other than rates of pay. The main cause was the upward movement of hours of work in contrast to the downward trend in the earlier period.

#### HOURS OF WORK AS AFFECTING WEEKLY EARNINGS IN MANUFACTURING INDUSTRIES

The Bureau of the Census collected information for 1914 and 1919 relating to prevailing hours of work in manufacturing industries.



Prevailing hours, as computed from frequency distributions published by the Bureau of the Census, averaged 55.5 hours per week in 1914 and 51.3 hours in 1919. The lower figure of prevailing hours for 1919 is particularly significant in view of the intensified demand for labor after the entry of the United States into the World War.

There was an extensive reduction of hours of work in major industries before the United States entered the war in April 1917. This is indicated by reports and special surveys.<sup>14</sup>

A movement for the reduction of hours beginning in the late summer of 1915, particularly in the machine trades, was mentioned in the discussion of average hourly earnings. This movement, initiated by the machinists, soon included other occupations. The general result was the introduction of the 8-hour day, accompanied by reductions in the normal length of the working week from 55 or more hours to 48 hours.

Summaries of the movement for shorter hours published in 1917 covered 534 reports of reductions in hours, and 193 of these reports gave information regarding the number of workers affected by reductions. The number of workers thus covered by incomplete reports for 1915, 1916, and the first 6 months of 1917 was 1,052,000. The movement for the adoption of the 8-hour day during this period extended to virtually every State in the Union and to all of the major groups of industries.

Hours of work in manufacturing industries in June 1939 were 37.3 per week, and in June 1941, 41.3 per week, an increase of 10.7 percent. Hours were also longer in most of the nonmanufacturing industries, notably in the various mining industries. Thus, the average in bituminous-coal mining rose from 25.2 in June 1939 to 31.7 in June 1941; in metalliferous mining, from 39.4 to 42.7; and in quarrying and nonmetallic mining, from 40.1 to 42.8 per week. The hours in building construction rose from an average of 33.4 in June 1939 to 35.3 in June 1941.

The general statistics of weekly hours make no distinction between regular hours and overtime hours. Special surveys, however, indicate that in several important industries overtime had become widespread as early as March 1941. The proportions of wage earners who were working overtime in March 1941 in the industries surveyed were as follows: Smelting and refining, 18 percent; explosives, 39 percent; aluminum manufactures, 44 percent; electrical machinery, 60 percent; brass, bronze, and copper products, 66 percent; ship-building, 68 percent; ammunition, 70 percent; engines (other than

<sup>14</sup> See Monthly Labor Review for October 1915 (pp. 17 and 18): Movement for Reduction of Hours of Labor in the Machine Trades; February 1916 (pp. 37 and 38): Reduction of Hours of Labor in the Machine Trades; August 1917 (pp. 37-43): Productivity of Labor in the Anthracite Coal Mines; and September 1917 (pp. 43-46): Prevailing Hours of Labor in the United States.

aircraft), 80 percent; machine-tool accessories, 83 percent; firearms, 88 percent; and machine tools, 95 percent. The average weekly hours of overtime per overtime worker ranged from 6.1 hours in smelting and refining to 13.8 hours in machine-tool accessories.

In a study of the same group of defense industries for June 1941, it was found that the percentages of wage earners working overtime and that the amount of overtime per overtime worker were greatest in two-shift plants. In these plants, 82.6 percent of all workers worked overtime and the average amount of overtime per overtime worker was 13.2 hours per week. The comparatively large amount of overtime in two-shift plants resulted from the lengthening of shifts by the use of overtime.<sup>15</sup>

The lengthening of the average hours of work greatly increased the amount of overtime paid for at overtime rates. The payment of premium rates was accelerated by the provisions of the Fair Labor Standards Act. In June 1939, the individual worker was permitted by law to work 44 hours per week at straight-time rates. In manufacturing industries, the average number of hours worked in June 1939 was only 37.3 hours per week and there was therefore at that time not a large amount of overtime. In June 1941, the maximum number of hours the individual was permitted under the law to work at straight-time rates was only 40 hours per week. At that time, the average number of hours of all workers in manufacturing industries, including part-time workers who were on the pay roll for any length of time whatsoever, was 41.3 hours per week. It is therefore apparent that there was a large increase in the amount of overtime work requiring overtime rates at not less than time and a half.

A significant study of overtime indicated that the higher rates paid for overtime did not raise labor costs or call for higher prices or for indemnification of defense contractors who were asked to adopt longer hours. A study of 260 corporations in 26 defense industries showed that profits tend to rise with increased production under longer hours even when overtime rates are paid to workers. The cost of overtime is more than counterbalanced by the increased utilization of plant facilities and the absorption of fixed overhead expenses in a larger volume of production.<sup>16</sup>

#### EXPANSION OF HIGH-WAGE INDUSTRIES AS AFFECTING WEEKLY EARNINGS

The increase in overtime was particularly noteworthy in the industries with comparatively high rates of pay. In manufacturing as a whole, between June 1939 and June 1941, average weekly hours rose

<sup>15</sup> See *Monthly Labor Review* for August 1941 (pp. 355-365): *Shift Operations in Selected Defense Industries*, March 1941. See also the article on p. 1140 of this issue on *Utilization of Plant Facilities Under the National Defense Program*, giving information summarized in the preceding paragraph.

<sup>16</sup> See *Monthly Labor Review* for July 1941 (pp. 9-17): *Overtime Pay in Relation to Costs and Profits* (reprinted as Serial No. R. 1341).

10.7 percent; in nondurable-goods industries, paying only 65.0 cents per hour in June 1941, hours rose only 5.9 percent; and in durable-goods industries, paying 82.2 cents per hour, weekly hours rose 15.2 percent. The increase in employment during the same period, expressed in terms of total hours worked (employment times weekly hours), rose 47 percent in all manufacturing combined; 22 percent in nondurable-goods industries; and 79 percent in durable-goods industries. In certain of the durable-goods industries with exceptionally high wages, the increases in weekly hours and in total hours worked were particularly significant. In blast furnaces, steel works, and rolling mills, paying 96.4 cents per hour in June 1941, weekly hours rose 22 percent, and total hours worked rose 84 percent. In machine tools, paying 83.1 cents per hour, weekly hours rose 23 percent, and total hours worked rose 185 percent. In shipbuilding, paying 95.1 cents per hour, weekly hours rose 17 percent, and total hours worked rose 213 percent.

There is no adequate information for comparing the trends of employment in the high-wage and low-wage industries during the period from 1914 to 1916, but it was not until after June 1916 that a program of production for war purposes attained the advanced stage of the national defense program in June 1941. The movement of workers into relatively high-paid durable-goods industries and defense industries currently in greater degree than in the years 1914-16 was therefore a factor tending to increase weekly earnings at a more rapid rate in 1939-41 than in the corresponding years of the World War.

#### WEEKLY EARNINGS IN INDIVIDUAL INDUSTRIES

Comparisons of trends in average weekly earnings in the two periods 1914-16 and 1939-41 can be made for several major industries. These include blast furnaces, steel works, and rolling mills, electric- and steam-railroad cars, paper and pulp, leather, boots and shoes, cotton goods, woolen and worsted goods, silk and rayon goods, men's clothing, and hosiery and underwear (table 2). Reports for these industries in the earlier period do not go back of January 1915, but in view of the depressed conditions prevailing in the later months of 1914, there was probably no upturn in weekly earnings during these months.

The indexes of weekly earnings (table 2) show no definite upward trend during approximately the first year of war in either period. There is indication, however, of a marked upward trend late in 1915 or early in 1916 and in the corresponding months of 1940 or 1941. The increases in most industries were much more marked in the present war than in the earlier period, a notable exception being woolen and worsted goods. In this industry, hourly earnings, as previously stated, increased 24 percent between May 1914 and the spring of 1916, as



compared to an increase of only 19 percent in the corresponding later period. Hours of work seem to have undergone no significant change between 1914 and 1916,<sup>17</sup> but increased materially in the later period.

In most of the industries, weekly earnings were strikingly variable in both periods. The variations as shown by the index numbers are undoubtedly in some degree to be accounted for by imperfect data, especially in the earlier period. Weekly earnings in both periods were subject, however, to several influences that caused fluctuations. In addition to factors regularly operative, as for instance, seasonality, there was in both periods an exceptional instability in hours of work, in the demand for goods, and in the occupational and rate structures accompanying shifts in types of goods produced.

TABLE 2.—*Indexes of Average Weekly Earnings in Specified Industries, June 1914 to August 1916 and June 1939 to August 1941*<sup>1</sup>

Month	Indexes of average weekly earnings (monthly average 1915 or 1940=100, unless otherwise stated)									
	Blast furnaces, steel works, and rolling mills <sup>2</sup>		Cars, electric and steam-rail-road <sup>3</sup>		Paper and pulp <sup>4</sup>		Leather <sup>4</sup>		Boots and shoes	
	Earlier period	Later period	Earlier period	Later period	Earlier period	Later period	Earlier period	Later period	Earlier period	Later period
	1914	1939	1914	1939	1914	1939	1914	1939	1914	1939
June.....		90		94		90		96		97
July.....		86		85		87		95		105
August.....		96		94		92		96		105
September.....		94		91		95		96		95
October.....		108		101		101		98		96
November.....		105		95		99		98		92
December.....		105		98		97		98		99
	1915	1940	1915	1940	1915	1940	1915	1940	1915	1940
January.....	89	99		98		94		97	101	105
February.....	99	94	94	101		95		95	98	104
March.....	100	92	101	105		94		94	94	102
April.....	101	91	99	99		94		93	87	91
May.....	96	95	99	98		99		94	92	88
June.....	103	100	103	97		99		93	98	95
July.....	92	97	105	93		98		94	99	106
August.....	100	102	96	101		97		95	101	106
September.....	100	104	95	101		97		95	101	103
October.....	101	105	101	98		98		99	109	100
November.....	108	106	101	97	110	98	90	97	114	93
December.....	112	110	114	105	105	102	98	103	105	104
	1916	1941	1916	1941	1916	1941	1916	1941	1916	1941
January.....	107	107	93	104	101	100	96	100	110	110
February.....	119	109	109	108	105	103	95	104	109	117
March.....	118	111	114	103	104	105	91	105	110	122
April.....	118	120	113	113	104	105	94	105	107	117
May.....	124	124	114	120	107	108	99	108	111	117
June.....	125	125	112	122	111	115	104	112	114	121
July.....	108	123	109	114	110	113	102	113	111	126
August.....	119	123	107	117	115	119	103	119	109	128

See footnotes at end of table.

<sup>17</sup> Full-time hours were reported as undergoing no change. (Bureau of Labor Statistics Bulletin No. 238, p. 16.)



TABLE 2.—Indexes of Average Weekly Earnings in Specified Industries, June 1914 to August 1916 and June 1939 to August 1941—Continued

Month	Indexes of average weekly earnings (monthly average 1915 or 1940=100, unless otherwise stated—Continued)									
	Cotton goods		Woolen and worsted goods		Silk and rayon goods		Men's clothing <sup>2</sup>		Hosiery and underwear <sup>3</sup>	
	1914	1939	1914	1939	1914	1939	1914	1939	1914	1939
June.....		92		95		94		98		97
July.....		93		96		93		99		95
August.....		94		94		96		105		102
September.....		98		93		96		96		100
October.....		98		96		100		102		108
November.....		103		98		103		97		106
December.....		104		98		102		102		104
	1915	1940	1915	1940	1915	1940	1915	1940	1915	1940
January.....	99	102	102	96	94	98		101	93	98
February.....	103	100	101	96	100	99	97	104	94	100
March.....	104	98	102	91	102	100	91	106	99	100
April.....	103	97	104	90	97	99	85	94	97	99
May.....	103	96	102	95	100	99	89	91	100	96
June.....	99	94	98	98	97	97	97	97	101	94
July.....	98	97	95	101	99	97	107	100	99	95
August.....	101	99	96	101	98	103	101	102	101	101
September.....	102	102	101	106	97	101	101	102	96	102
October.....	95	104	92	106	103	102	109	98	105	106
November.....	99	103	102	103	107	101	117	97	106	106
December.....	98	106	105	109	105	105	110	106	108	105
	1916	1941	1916	1941	1916	1941	1916	1941	1916	1941
January.....	102	105	111	107	103	101	97	105	107	100
February.....	109	108	116	111	111	105	103	111	111	105
March.....	110	110	117	111	112	107	102	113	111	107
April.....	112	118	117	111	110	110	106	110	111	105
May.....	116	120	124	121	112	114	100	112	112	107
June.....	115	120	122	123	113	116	107	118	112	107
July.....	112	123	120	122	102	116	113	118	106	109
August.....	114	125	119	124	107	119	118	122	106	107

<sup>1</sup> Indexes of per capita weekly earnings for these and certain other industries were computed by the Bureau of Labor Statistics from its old series of employment and pay rolls. (See Monthly Labor Review for January 1919, pp. 141-144.) The current indexes of employment and pay rolls do not extend back of 1919; and the current series of average weekly earnings, beginning in 1932, are computed directly from sample data for each industry, the total reported wage payments during 1 week of each month being divided by the number of wage earners reported for the pay-roll period covered.

<sup>2</sup> In the published data for the earlier period, this industry was designated as iron and steel.

<sup>3</sup> The base period is the year ended January 1916 (for the later years, January 1941). The indexes for cars (electric and steam railroad) for the later period exclude data for establishments operated by railroad companies.

<sup>4</sup> The base period is November 1915 to January 1916 (for the later years, November 1940 to January 1941). Paper and pulp industry: In the earlier period, most of the information collected related to paper.

<sup>5</sup> For the later period, average weekly earnings were calculated by combining Bureau of Labor Statistics published figures of weekly earnings for the two industries, hosiery and underwear, using as weights the total numbers employed.

### Cost of Living and Wholesale Prices, 1914-16 and 1939-41

The Bureau of Labor Statistics index of cost of living in July 1915 was 1.7 percent higher than in June 1914. There was an identical rise during the corresponding period from June 1939 to July 1940. The earlier series advanced somewhat more rapidly after July 1915 than did the later series after July 1940, but the difference up to August of 1916 and 1941 remained slight. The earlier series was 10.1 percent higher in August 1916 than in June 1914, and the later series rose in the corresponding period only 7.5 percent. (See table 3.)

TABLE 3.—Indexes of Cost of Living and Wholesale Prices from June 1914 to August 1916 and from June 1939 to August 1941

Month	Cost of living		Wholesale prices	
	Earlier period <sup>1</sup> (June 1914 = 100)	Later period (June 1939 = 100)	Earlier period (June 1914 = 100)	Later period (June 1939 = 100)
	1914	1939	1914	1939
June.....	100.0	100.0	100.0	100.0
July.....	101.0	<sup>2</sup> 100.3	99.9	99.7
August.....	102.5	<sup>2</sup> 100.0	103.3	99.2
September.....	103.0	102.0	104.2	104.6
October.....	102.3	<sup>2</sup> 101.7	100.9	105.0
November.....	102.4	<sup>2</sup> 101.5	100.1	104.8
December.....	102.3	101.0	99.9	104.8
	1915	1940	1915	1940
January.....	101.8	<sup>2</sup> 100.9	101.0	105.0
February.....	101.3	<sup>2</sup> 101.5	101.8	104.1
March.....	100.4	101.2	101.2	103.7
April.....	101.0	<sup>2</sup> 101.3	101.9	104.0
May.....	101.4	<sup>2</sup> 101.5	102.4	103.7
June.....	101.7	101.9	101.3	102.5
July.....	101.7	<sup>2</sup> 101.7	102.8	102.8
August.....	101.8	<sup>2</sup> 101.4	101.8	102.4
September.....	102.3	101.8	101.3	103.2
October.....	103.2	101.6	104.2	104.1
November.....	103.8	101.5	106.4	105.3
December.....	104.2	102.1	109.8	105.8
	1916	1941	1916	1941
January.....	105.2	102.2	114.2	106.9
February.....	105.4	102.2	116.5	106.6
March.....	106.1	102.6	119.3	107.8
April.....	107.0	103.7	121.2	110.1
May.....	107.6	104.4	122.4	112.3
June.....	108.9	106.1	123.0	115.2
July.....	108.9	106.7	123.7	117.5
August.....	110.1	107.5	126.3	119.4

<sup>1</sup> See footnote 18 in text below.<sup>2</sup> Estimated from prices of food, coal, electricity, and gas as of this date and from prices of all other groups as of June 15, 1939.<sup>3</sup> Estimated from prices of food, coal, electricity, and gas as of this date and from changes in costs of all other groups between quarterly reports, assuming an even rate of change between quarters.

The advances in the wholesale-price indexes from June 1914 to July 1915 and from June 1939 to July 1940 were also, by coincidence, identical. The index in each period rose 2.8 percent, as compared to the rise of 1.7 percent during the same periods in the two cost-of-living series. After July of 1915 and of 1940, the wholesale-price index, like the cost-of-living index, rose more rapidly in the earlier than in the later period. In August 1916, the index was 26.3 percent above June 1914, and in August 1941, the increase was 19.4 percent above June 1939.

In both periods, wholesale prices outran cost of living by wide margins. In contrast to the 26.3-percent rise in wholesale prices by August 1916 was the increase of only 10.1 percent in cost of living; and in contrast to the 19.4-percent rise in wholesale prices by August 1941 was the increase of only 7.5 percent in cost of living.

*Cost of Living and Wholesale Prices, June 1914 to December 1923*

The comparisons in this article are necessarily limited to approximately the first 2 years of the two periods of warfare. The movements of wages and especially of prices during the two periods show striking similarities. It is not assumed that the years following 1941 will parallel those following 1916, but the trends throughout the first World War and post-war period of readjustment are interesting in themselves and knowledge of them may throw light on policies affecting current prices and wages. For convenient reference, monthly indexes of cost of living<sup>18</sup> and of wholesale prices for the entire period of exceptional fluctuations during the first World War and post-war period are given in table 4.

The rise in cost of living and in wholesale prices that began in 1914 continued almost without interruption throughout the war period and for about a year and a half beyond the war. The high point in wholesale prices was reached in May 1920, at 148.1 percent above June 1914, and in cost of living in June 1920, at 110.4 percent above June 1914. The succeeding downward movements were stopped above pre-war levels. The low point in wholesale prices was in January 1922, at 35.6 percent above June 1914, and by the end of 1922 prices had become comparatively stable, almost 50 percent above June 1914. The low point in cost of living was reached in August 1922, at 67.0 percent above June 1914, only a little below the comparatively stable levels characteristic of the period from 1923 to 1930.

Up to August 1917, wholesale prices advanced much more rapidly than cost of living. Wholesale prices for that month were 85.2 percent above June 1914, and cost of living was only 31.1 percent higher. Both series thereafter continued to rise, but cost of living rose much more rapidly than wholesale prices. It was not, however, until the post-war decline in prices began in the latter part of 1920 that cost of living was higher, relative to June 1914, than was the level of wholesale prices. In November 1920, cost of living was 99.4 percent higher than in June 1914, and wholesale prices were only 97.9 percent higher. There was later a much wider divergence. In August 1921, cost of living was 78.3 percent above June 1914, and wholesale prices were only 38.7 percent higher. In December 1923, the corresponding

<sup>18</sup> The monthly index of cost of living for the period was constructed by the Cost of Living Division of the Bureau of Labor Statistics by combining two separate indexes—an index of food costs and an index of all costs except those for food. Each series was given a weight corresponding to its relative importance in family spending as shown by the Bureau's 1917-19 study of family expenditures.

The monthly estimates for all items except food were based on the assumption of a constant rate of change between the dates for which data were currently collected. The food indexes used for the period March 1919 to December 1922 were based on quarterly indexes (Bureau of Labor Statistics Bulletin No. 635, Retail Prices of Food, 1923-36, pp. 189-190), which had been constructed from price data for 42 foods, the weights used being those adopted in 1935. The estimates for intervening months were based on changes shown in the Bureau's original indexes of 22 foods, so adjusted that the sum of the three monthly changes in each quarter is equal to the quarterly change shown by the new series. The original food-cost indexes for the period before March 1919 were linked to the new series by means of the March 1919 ratio.



percentages were 73.9 and 45.5. Thus, the violent price changes of the war and post-war periods raised prices generally much above pre-war levels; but when comparative stabilization was reached, the rise of prices affecting the cost of living was much greater than the advance of wholesale prices.

TABLE 4.—*Indexes of Cost of Living<sup>1</sup> and Wholesale Prices, June 1914 to December 1923*

[June 1914=100]

Year and month	Index of—		Year and month	Index of—		Year and month	Index of—	
	Cost of living	Wholesale prices		Cost of living	Wholesale prices		Cost of living	Wholesale prices
<i>1914</i>			<i>1917—Con.</i>			<i>1920—Con.</i>		
June.....	100.0	100.0	September.....	133.5	183.2	November.....	199.4	197.9
July.....	101.0	99.9	October.....	135.9	181.3	December.....	194.8	179.1
August.....	102.5	103.3	November.....	136.1	182.2	<i>1921</i>		
September.....	103.0	104.2	December.....	137.7	182.3	January.....	191.7	169.1
October.....	102.3	100.9	<i>1918</i>			February.....	185.5	155.6
November.....	102.4	100.1	January.....	140.4	185.5	March.....	183.9	151.9
December.....	102.3	99.9	February.....	142.1	182.0	April.....	181.7	146.7
<i>1915</i>			March.....	141.3	187.5	May.....	178.3	142.7
January.....	101.8	101.0	April.....	142.7	190.4	June.....	177.3	138.6
February.....	101.3	101.8	May.....	145.6	190.1	July.....	177.5	138.6
March.....	100.4	101.2	June.....	148.5	191.4	August.....	178.3	138.7
April.....	101.0	101.9	July.....	151.8	195.8	September.....	176.5	138.6
May.....	101.4	102.4	August.....	154.5	199.3	October.....	175.9	139.6
June.....	101.7	101.3	September.....	158.5	204.0	November.....	175.1	139.8
July.....	101.7	102.8	October.....	161.1	202.2	December.....	174.1	137.8
August.....	101.8	101.8	November.....	163.4	202.2	<i>1922</i>		
September.....	102.3	101.3	December.....	166.2	202.2	January.....	170.6	135.6
October.....	103.2	104.2	<i>1919</i>			February.....	169.7	137.8
November.....	103.8	106.4	January.....	166.5	199.4	March.....	168.0	137.7
December.....	104.2	109.8	February.....	162.7	192.6	April.....	167.9	138.3
<i>1916</i>			March.....	164.5	194.8	May.....	167.9	142.6
January.....	105.2	114.2	April.....	167.6	197.3	June.....	168.3	142.9
February.....	105.4	116.5	May.....	169.7	200.7	July.....	168.6	147.5
March.....	106.1	119.3	June.....	170.4	201.2	August.....	167.0	146.3
April.....	107.0	121.2	July.....	174.9	209.3	September.....	167.2	147.3
May.....	107.6	122.4	August.....	178.0	214.1	October.....	168.3	147.8
June.....	108.9	123.0	September.....	179.2	209.3	November.....	169.0	149.1
July.....	108.9	123.7	October.....	182.1	210.1	December.....	169.6	149.4
August.....	110.1	126.3	November.....	186.2	214.4	<i>1923</i>		
September.....	112.1	128.9	December.....	190.6	223.3	January.....	169.2	151.3
October.....	113.5	135.2	<i>1920</i>			February.....	168.7	153.3
November.....	115.6	144.5	January.....	194.4	234.0	March.....	169.3	155.0
December.....	116.1	147.2	February.....	196.3	233.1	April.....	170.3	154.2
<i>1917</i>			March.....	198.6	235.3	May.....	170.6	151.2
January.....	117.5	151.5	April.....	204.1	245.5	June.....	171.3	148.8
February.....	120.3	155.0	May.....	207.6	248.1	July.....	173.1	146.0
March.....	121.1	159.8	June.....	210.4	247.0	August.....	172.5	145.1
April.....	126.2	169.3	July.....	209.6	246.0	September.....	173.4	147.9
May.....	129.2	179.1	August.....	203.9	239.5	October.....	173.8	147.5
June.....	130.3	181.0	September.....	197.0	230.3	November.....	174.2	146.0
July.....	129.3	182.5	October.....	200.6	213.9	December.....	173.9	145.5
August.....	131.1	185.2						

<sup>1</sup> See footnote 18 in text.

### *Average Weekly Earnings in Manufacturing Industries, June 1914 to December 1923*

There is no more basis for assuming that wage changes in the years following 1941 will parallel the changes after 1916 than for assuming a paralleling of price trends; but knowledge of the movement of wages during the war period and the years of readjustment thereafter is no less desirable than is a knowledge of price trends. It has already



been noted that during the first World War, wage statistics, especially those relating to rates and hourly earnings, were less extensive and less suited to the tracing of general movements than were statistics of prices. Information is available, nevertheless, regarding average weekly earnings in manufacturing by months for the entire period. The trends of weekly earnings in manufacturing and of earnings adjusted by the cost-of-living index from June 1914 to December 1923, when wages as well as prices had attained comparative stability, are shown in table 5.<sup>19</sup>

TABLE 5.—Average Weekly Earnings in All Manufacturing Industries Combined, and Index of Earnings Adjusted by Cost-of-Living Index, June 1914 to December 1923<sup>1</sup>

[Index numbers: June 1914=100]

Year and month	Average weekly earnings			Year and month	Average weekly earnings		
	Amount	Index	Index adjusted by cost-of-living index		Amount	Index	Index adjusted by cost-of-living index
<b>1914</b>				<b>1916</b>			
June.....	\$11.62	100.0	100.0	January.....	11.72	100.9	95.9
July.....	11.47	98.7	97.7	February.....	12.66	109.0	103.4
August.....	11.46	98.6	96.2	March.....	12.88	110.8	104.4
September.....	11.41	98.2	95.3	April.....	12.89	110.9	103.6
October.....	11.21	96.5	94.3	May.....	13.34	114.8	106.7
November.....	11.27	97.0	94.7	June.....	13.37	115.1	105.7
December.....	11.49	98.9	96.7	July.....	12.52	107.7	98.9
<b>1915</b>				August.....	13.03	112.1	101.8
January.....	11.38	97.9	96.2	September.....	13.29	114.4	102.1
February.....	11.35	97.7	96.4	October.....	13.65	117.5	103.5
March.....	11.57	99.6	99.2	November.....	14.22	122.4	105.9
April.....	11.47	98.7	97.7	December.....	14.52	125.0	107.7
May.....	11.65	100.3	98.9	<b>1917</b>			
June.....	11.72	100.9	99.2	January.....	14.04	120.8	102.8
July.....	11.58	99.7	98.0	February.....	14.12	121.5	101.0
August.....	11.79	101.5	99.7	March.....	14.75	126.9	104.8
September.....	11.76	101.2	98.9	April.....	14.20	122.2	96.8
October.....	12.16	104.6	101.4	May.....	15.50	133.4	103.3
November.....	12.20	105.0	101.2	June.....	15.60	134.3	103.1
December.....	12.44	107.1	102.8	July.....	15.06	129.6	100.2

<sup>1</sup> Average weekly earnings from January 1919 to December 1923 were derived by dividing total weekly pay rolls by total employment. (Bureau of Labor Statistics mimeographed release, January 1937, giving revised estimates before the exclusion of railroad repair shops from manufacturing industries.) Average weekly earnings from June 1914 to December 1918 were calculated as follows: Index numbers of average weekly earnings from November 1915 to January 1919 were derived by dividing indexes of pay rolls by indexes of employment (Monthly Labor Review, August 1925, p. 115). These index numbers were then used to extend the average weekly earnings back to November 1915, linking at January 1919. For months preceding November 1915, the average weekly earnings for New York State (New York State Department of Labor, Industrial Bulletin, vol. 2, p. 221) were linked to the Bureau of Labor Statistics series by means of the ratio of the averages for November and December 1915.

The separate indexes of employment and pay rolls for the period before 1919 appear to have serious biases, but the derived estimates of average weekly earnings are close approximations. The averages for 1914 and 1919 as computed from the monthly data are almost identical with the averages derived from the Census of Manufactures for these 2 years, and the intervening monthly figures of average weekly earnings are presumably in substantial accord with the monthly trend. The figures in this table include railroad repair shops, dropped from manufacturing industries in 1937 by the Bureau of the Census.

<sup>19</sup> The coverage of manufacturing industries during the years included in table 5 was not the same as the current coverage in reports to the Bureau of the Census and the Bureau of Labor Statistics. The most important difference is the exclusion from Census data, beginning in 1937, of railroad repair shops. This difference in coverage affects the average weekly earnings in table 5 as compared to the current series published each month by the Bureau of Labor Statistics and as compared to the estimates in an article published in the Monthly Labor Review for September 1940, Wages, Hours, and Productivity of Industrial Labor, 1909 to 1939, p. 534 (reprinted as Serial No. R. 1150). For the method of computing the averages in the article just mentioned, see table 4, footnote 1, of that article.

TABLE 5.—Average Weekly Earnings in All Manufacturing Industries Combined, and Index of Earnings Adjusted by Cost-of-Living Index, June 1914 to December 1923—Continued.

[Index numbers: June 1914=100]

Year and month	Average weekly earnings			Year and month	Average weekly earnings		
	Amount	Index	Index adjusted by cost-of-living index		Amount	Index	Index adjusted by cost-of-living index
<i>1917—Con.</i>				<i>1920—Con.</i>			
August.....	15.66	134.8	102.8	November.....	27.00	232.4	116.5
September.....	15.82	136.1	101.9	December.....	26.80	230.6	118.4
October.....	17.09	147.1	108.2	<i>1921</i>			
November.....	17.79	153.1	112.5	January.....	25.10	216.0	112.7
December.....	17.63	151.7	110.2	February.....	24.18	208.1	112.2
<i>1918</i>				March.....	24.11	207.5	112.8
January.....	16.22	139.6	99.4	April.....	23.59	203.0	111.7
February.....	16.37	140.9	99.2	May.....	23.17	199.4	111.8
March.....	17.82	153.4	108.6	June.....	22.87	196.8	111.0
April.....	18.17	156.4	109.6	July.....	22.04	189.7	106.9
May.....	19.50	167.8	115.2	August.....	22.29	191.8	107.6
June.....	19.57	168.4	113.4	September.....	21.64	186.2	105.5
July.....	20.02	172.3	113.5	October.....	21.20	182.4	103.7
August.....	21.64	186.2	120.5	November.....	20.89	179.8	102.7
September.....	21.97	189.1	119.3	December.....	21.59	185.8	106.7
October.....	23.28	200.3	124.3	<i>1922</i>			
November.....	21.60	185.9	113.8	January.....	20.69	178.1	104.4
December.....	23.05	194.8	119.4	February.....	21.00	180.7	106.5
<i>1919</i>				March.....	21.31	183.4	109.2
January.....	22.27	191.7	115.1	April.....	21.05	181.2	107.9
February.....	21.59	185.8	114.2	May.....	21.46	184.7	110.0
March.....	21.68	186.6	113.4	June.....	21.93	188.7	112.1
April.....	21.43	184.4	110.0	July.....	21.74	187.1	111.0
May.....	21.49	184.9	109.0	August.....	22.20	191.0	114.4
June.....	21.72	186.9	109.7	September.....	22.50	193.6	115.8
July.....	21.78	187.4	107.1	October.....	22.51	193.7	115.1
August.....	22.46	193.3	108.6	November.....	23.05	198.4	117.4
September.....	23.09	198.7	110.9	December.....	23.30	200.5	118.2
October.....	22.61	194.6	106.9	<i>1923</i>			
November.....	23.35	200.9	107.9	January.....	22.83	196.5	116.1
December.....	24.53	211.1	110.8	February.....	23.21	199.7	118.4
<i>1920</i>				March.....	23.82	205.0	121.1
January.....	25.11	216.1	111.2	April.....	24.03	206.8	121.4
February.....	25.01	215.2	109.6	May.....	24.77	213.2	125.0
March.....	26.23	225.7	113.6	June.....	24.66	212.2	123.9
April.....	25.98	223.6	109.6	July.....	23.92	205.9	118.9
May.....	26.90	231.5	111.5	August.....	23.95	206.1	119.5
June.....	27.48	236.5	112.4	September.....	23.95	206.1	118.9
July.....	27.03	232.6	111.0	October.....	24.76	213.1	122.6
August.....	27.47	236.4	115.9	November.....	24.58	211.5	121.4
September.....	27.40	235.8	119.7	December.....	24.64	212.0	121.9
October.....	27.45	236.2	117.7				

Average weekly earnings in manufacturing as a whole fell somewhat below June 1914 during most of the ensuing year, but rose rapidly thereafter. At the end of the World War, the average was approximately double the pre-war average. In most of the year 1919 the average underwent little change. Late in 1919 the upturn was resumed, and from November 1919 to April 1921 the average was more than double the pre-war average. The depressed conditions of late 1921 and of 1922 caused a decline, but the year 1923 marked a return to somewhat more than double the June 1914 figure.

Average weekly earnings adjusted by the cost-of-living index fluctuated after late 1915 slightly above the pre-war level, and in 1918 rose significantly above that level. In the post-war period, real

weekly earnings ranged significantly above the pre-war average and in 1923 attained relative stabilization at a level approximately one-fifth above June 1914.

The figures of average weekly earnings for manufacturing industries alone are probably not representative of all employments. The fragmentary available evidence indicates a somewhat greater variability of employment and of earnings in manufacturing than in the national economy as a whole. It is probable that average weekly earnings in manufacturing rose higher in periods of upturn and fell lower in periods of depression than the average in all employments combined. The long-term trend in manufacturing, however, from the pre-war period to the years of relative stability after the war, appears to have been substantially representative.

The average worker in manufacturing industries could buy more with his weekly wage during most of the war period and especially thereafter than before the war. There were important exceptions accompanying lags in wages and sharp upturns in cost of living. The general trend of average weekly earnings, however, in terms of what the wage earner's dollar could buy, was significantly upward, especially after the war. There was, at the same time, in this later period a much greater rise in the productivity of labor than in real earnings. Between 1919 and 1923, average hourly earnings in manufacturing, when adjusted by the cost-of-living index, rose about 11 percent and average weekly earnings adjusted rose 10 percent, in contrast to a rise of about 31 percent in output per man-hour.<sup>20</sup>

<sup>20</sup> See reference cited in footnote 3 on p. 1107.

## WAGE PROVISIONS IN UNION AGREEMENTS <sup>1</sup>

INCREASING and protecting the earnings of workers has always been a predominant function of trade-unions. In fact, the earliest written agreements between unions and employers were confined almost entirely to wage matters and were referred to as "wage agreements," "scale agreements," or "price lists." Reflecting the increasing complexity of industrial relations, wage provisions in union agreements have expanded to include many items which have a bearing on the protection and improvement of living standards. Whereas formerly a simple statement of craft or occupation minima was considered sufficient, present-day agreements, in addition to specifying particular wage rates, often outline in detail the methods of job classification and adjustment of wage levels, methods for changing piece rates and production standards, bonus payments, allowances, deductions, and other factors affecting the income of workers.

Practice varies, however, with respect to the amount of detail with which wage matters are treated in current agreements. When wage rates are indicated in detail, the itemized wage listings frequently are incorporated as a supplement to the agreement, with the understanding that particular rates may be changed by joint negotiation during the life of the agreement. Many agreements, especially for large plants with varied occupations, do not contain detailed lists of the wage rates to be paid for the various jobs, but merely specify one or several minimum rates. Some do not mention any rates at all, but simply indicate that there shall be no change from current rates, or that current rates shall be changed by a specified percentage or amount.

There are two general methods of wage determination—time rates under which wages are calculated at a fixed hourly, daily, weekly, or monthly amount; and incentive plans under which workers' earnings fluctuate more or less directly in accordance with the amount of work produced. Some incentive plans provide minimum hourly or weekly wages, with incentive pay for work performed above a specified amount. Because of the limited application of any specific time or piece rates, this article does not deal with time or piece rates as such but rather with those general wage provisions found in union agreements which are supplementary to rate listings or which concern methods of determining wage rates.

<sup>1</sup> This article is a portion of a comprehensive study of provisions in union agreements now being made by the Bureau's Industrial Relations Division.



### *Time and Method of Wage Payment*

Throughout industry the weekly pay day is most common, although semimonthly and monthly pay periods also occur. (A number of States have legislation specifying that wages shall be paid weekly, or in some cases, at least semimonthly.) In many agreements a specific day of the week is named as the weekly pay day for all employees, with the further provision that, should this fall on a holiday, pay day shall be the day preceding.

In general, union agreements do not require that each pay shall cover all accrued time, including that of the pay day, although this is the common practice with small employers or for workers with a fixed weekly wage or salary. A few agreements specify that payment is to be on the day following the close of the pay period, while in others the employer is given from 2 to 5 days in which to prepare his pay roll.

Wage payments are frequently required to be in cash. Workers experience difficulty in cashing checks, sometimes having to pay a fee for that service. In addition, there have been cases in which insolvent employers issued wage checks without funds to support them, causing workers to lose wages due them. The requirement of cash wage payments also prevents employers from issuing scrip or other tokens redeemable only at company stores.

Other agreement provisions governing the payment of wages require payment to be made on company time and company property, as well as protecting employees from having to stand in line to receive wages. Large plants sometimes provide for different pay days for different departments.

Each employee shall be paid on each pay day in full and in cash for all regular time and overtime worked. Pay days shall be on the last day of each week. All employees will be paid on company time and on company property and will not be required to stand in line to receive pay. If the regular pay day falls on a holiday, employees will be paid on the day preceding the holiday.

### *Wage Differentials*

*Differentials according to type of business.*—Wage-rate differentials are most often based on occupational differences according to skill required, physical difficulty, etc. In addition to such differentials, agreements covering a number of employers engaged in different classes or types of work sometimes provide different wage scales for each classification of employers. The purpose of such provisions is to adjust the wage rates to the employer's grade of work or service and, indirectly, to his ability to pay higher or lower scales of wages. Hotels and restaurants, for example, may be classified according to their type of business. Moving-picture theaters are classified according to their seating capacity, location, and type of pictures

exhibited. The shops in some branches of the garment and shoe industries may be classified in relation to the price of the line of goods produced, as in the following example:

**Higher- and lower-priced garments:** The association and the union agree that there are two general classes of dresses manufactured by the members of the association; these general classes are designated as the "higher-priced dresses," and the "lower-priced dresses"; the phrase "higher-priced dresses" shall refer to a garment whose sale price is above \$5; the phrase "lower-priced garments" shall refer to a garment whose sale price is not more than \$5; the employees in the crafts enumerated below shall work on a piece-work basis, and at the following basic rate.

**Sex differentials.**—Many unions have faced the problem of the displacement of men in certain occupations by woman workers doing the same work for lower wages. Therefore some agreements include provisions forbidding wage differentials based on sex, as in the following:

Equal pay must be given for equal work and there will be no differentials in pay established on the basis of sex during the life of this agreement.

In other cases sex differentials are simply abolished in the course of wage negotiations, and specific prohibitions do not appear in the agreement.

**Disabled or older employees.**—Although unions insist on rigid adherence to the wage standards set forth in the agreement for all regular employees, a tolerance is sometimes allowed for aged or handicapped workers. If these employees cannot maintain the production standards, lower rates are negotiated at the time the agreement is signed or subsequently as cases arise. Some agreements specify a special minimum rate below which wages of substandard workers may not fall.

In the case of a disabled or older employee unable to maintain regular production standards, the employer and the union may agree upon a special rate for the employee but this rate will not be less than 75 percent of the regular rate of pay.

**Hazardous or unpleasant work.**—Payment of wages at the rate of a fixed percent above the regular wages is sometimes provided for an especially hazardous or unpleasant occupation or duty. In such cases, this type of work is usually specifically designated in the agreement. For example, in longshoring agreements it is customary to specify "penalty rates" for handling explosives, acids which give off unpleasant or dangerous fumes, etc.

In maritime-transportation agreements extra-pay provisions have been negotiated for hazards arising out of travel in war zones. In some maritime agreements transportation back to the United States and full pay until arrival are guaranteed to maritime workers whose ship is lost.

The company agrees to pay its employees emergency compensation to cover war hazards equal to — percent of their basic wages from the date of sailing of

the steamship for the voyage from its last port in the United States to ports in — and return to the first port in the United States, or until date of armistice if such date occurs before arrival at a United States port.

### *Pay During Temporary Transfer*

In most agreements employees are protected against loss of earnings when temporarily assigned to work which pays less than their regular rate of pay. However, if temporarily transferred to higher-rated work, the employer is usually required to pay the worker the higher rate which goes with the job he is given.

An employee temporarily transferred to a higher-paid position will receive the higher rate which goes with that position; but an employee temporarily transferred to a lower-paid position will continue to receive his regular rate of pay.

### *Minimum Call Pay*

A long-standing complaint of workers in industries having seasonal or intermittent employment is that they have been compelled to waste time and carfare in reporting for work when no work was available. A common provision in union agreements therefore guarantees a minimum payment to employees reporting or called to work, and places on the employer the obligation to notify employees when no work is available. In some agreements the notification may be by bulletin-board announcements posted the day before. In others the foreman may notify individual workers whether or not to report for work on the following day.

Unless the employees are ordered not to report, they are usually guaranteed pay for a specified number of hours, whether or not work is available. This minimum guaranty ranges from 2 to 4 hours in most agreements. In some agreements the employees are further guaranteed that if they work a certain number of hours (usually half of their regular shift), they must be provided work or pay for a full shift.

Some agreements which guarantee minimum call pay exempt the employer from such payment if the lack of work is due to a cause beyond the employer's control, such as inclement weather, failure of raw materials to arrive, and similar causes.

All regular employees will be considered called to work unless notified not to report at least — hours prior to their regular starting time. Any employee called to work but required to work less than — hours will be given — hours' pay; any employee required to work more than — hours but less than a full shift will be paid for a full day's work.

### *"Dead" Time*

Production employees may be obliged to spend time waiting for material to be brought to them, for machinery to be adjusted or repaired, or other matters which are no fault of their own. When



paid by the piece or job, this automatically reduces earnings. To avoid complete loss of pay under these circumstances, agreements usually provide either that workers be paid their regular basic rate during "dead" time, or a special rate such as one-half of their regular rate. In some cases a limit is placed on the amount of "dead" time allowed; if the stoppage exceeds this limit, the workers are sent home.

Piece workers obliged to lose more than 10 minutes' time due to power shut-down, machine breaks, or when waiting for materials after having notified supervisors of such condition, shall be paid during the time of waiting at the hourly rate of the department. This does not apply when these delays are caused by labor stoppages over which the supervisor has no control.

### *Traveling Pay*

Agreements covering employees who are forced by the nature of their employment to travel out of town to their place of work frequently specify that the employer shall bear the cost of such out-of-town travel. The agreement may specify a fixed amount to be paid for each day away from home or may provide merely that the employer pay the cost of board and lodging at prevailing rates in the community. In some cases the time spent in traveling also is compensated at the employees' regular rate of pay.

The employer will pay transportation costs for employees required to go on out-of-town jobs. All time consumed in traveling to and from an out-of-town job is to be paid for at the regular rate of wages, but will not exceed 8 hours in every 24 hours. An employee going out of town at night will not be paid, but sleeping accommodations and meals will be provided. When an employee is required to remain out of town until a job is completed, the employer will pay for his board and lodging at the rate of \$—— a day, 7 days a week.

*Out-of-town work.*—In the building trades, the problem of wage rates on out-of-town work often arises. The wages to be paid on such work are usually the home rate or the prevailing rate where the job is located, whichever is higher. Some agreements specify that men shall be guaranteed full-time work while away from home.

When required to work out of town, employees will be paid the wages and work the hours established by this agreement, unless local wages are higher, in which case the local wages will be paid. All employees working out of town will receive full-time employment during such period.

### *Deductions for Poor Work*

The problem of deduction for spoiled or damaged goods has been a source of contention between employers and unions in certain industries. Placing of blame or responsibility is very frequently hard to determine; the worker contends it was the fault of his machine or the materials, while the employer attributes it to the worker's carelessness. Furthermore, the unions feel that no person is infallible and that workers' occasional mistakes, like that of management, should be



charged to operating costs. Reflecting this point of view, some agreements forbid all deduction for breakage or spoilage.

Prohibited from penalizing, an employer might resort to outright discharge for careless work. As an alternate to complete loss of income, some agreements allow deductions for spoilage, if directly caused by the individual penalized, but the union may take up as a grievance any cases of undue hardships on employees.

The employer agrees not to charge any employee for damage of materials or goods unless the damage is caused by the direct or actual carelessness of that employee. The issue of carelessness may be taken up through the regular grievance procedure.

### *Uniforms and Equipment Perquisites*

If employees are required to use special uniforms, raincoats, tools, or other equipment, it is frequently provided in agreements that these must be furnished at no cost to the employee. In other agreements, the burden of paying for such equipment may be placed on the employee, but usually a limitation is placed on the total cost to the workers.

The employer will furnish and maintain, without charge to the employees, wearing apparel required in the course of their work when such is unsuitable for wear outside of working hours.

The employer may deduct from an employee's pay the cost of such [uniforms, equipment] as are required in the course of the employee's work, but such deduction is not to exceed \$— per pay period until the [uniforms, equipment] are paid for.

In a few industries, the custom is to allow certain items which constitute net additions to the monetary wages granted to employees. The right to buy goods at discount, for example, is common in retail clerks' agreements. In other agreements employees are furnished meals and lodging, receive free transportation for themselves and members of their families, etc. These items are sometimes specifically outlined in union agreements. Because of their particular nature, no examples are cited.

### *Incentive-Wage Plans*

In their simplest form, incentive wages are straight piece rates, under which employees are paid a fixed amount for each article worked on or produced. More complicated "bonus" or "point" systems are computed through formulas based on the theory of allowing workers a certain percentage of the labor cost saved through individual production in excess of standard. Incentive wages may also be computed on a group basis, with bonuses distributed at the end of a period based on the total production of the group during that period. Incentive-wage plans are usually, although not always, based on time studies of job elements to determine the expected production of workers on the job.

Incentive-wage plans exist generally throughout certain industries, while time rates prevail in many others. The apparel trades, for example, including clothing, shoes, hats and millinery, have long been characterized as "piece-rate" industries. Much of coal mining is on a tonnage basis. In the rubber, glass, and electrical products industries the "point" incentive system such as "standard hour," "measured day rate," and others have been widely introduced. The construction, printing, and service industries, however, are examples of industries in which time rates prevail.

Some unions have opposed incentive methods of wage determination because of a fear of speed-up. Under some of the more complicated "formula" incentive plans, workers have complained that, because of the complicated nature of the system, it is practically impossible for them to compute accurately the amount of their earnings and they often suffer fluctuations in earnings without knowing the exact cause of the variation.

On the other hand, unions in some industries have accepted incentive methods as logical and desirable, and in some instances, the union has actively favored the extension of piece rates in the industry. Several unions have engaged in a program of standardization of labor costs throughout entire sections of the industry. Such a program is facilitated by uniformity of rates and definitions of units to which the rates apply.

Where incentive methods of wage determination were firmly established before collective bargaining was introduced in the industry, the unions have usually directed their attention not so much toward the elimination of the incentive system as to securing a degree of participation in the setting of rates and the standards on which the rates are based. Participation by the employees and their representatives in working out the details of the incentive plan and the job standards upon which rates are based has reduced or eliminated many of the injustices and misunderstandings which workers have complained about in the past.

*Fixing of piece rates.*—Participation by the union in the details of the incentive plan takes place in many ways. There may be participation in the selection and installation of the incentive plan itself, in the conduct of time studies, or merely in the negotiations concerning the rates. Unions usually insist upon having a voice in the determination of new rates in order to prevent continuous lowering of earnings or increase in work loads. Union participation may take the form of advance negotiations on all new and changed rates before they go into effect. In other cases the company may install the rates, with the understanding that there may be grievance negotiations on rates which the union considers unsatisfactory.

In piece-rate industries, such as the apparel industries, in which there are continuous rate changes owing to new styles and new materi-

als, unions generally participate in the setting of piece rates before they go into effect. In these industries there are no complicated incentive systems and, in many instances, no time studies. Rates are on a straight piece-work basis and are set on the basis of the past experience of the workers on the job, plus short trial periods on the new work.

All piece rates are to be agreed upon by the employer and the union. If time studies are required, the employer and the union will agree upon the conditions of the time study and jointly conduct the time study. If the employer and the union are unable to agree upon the conditions or results of a time study, the rate in dispute will be settled through the regular procedure for handling grievances. No worker shall be required to do any work until the piece rate has been determined.

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A "test hand" will be chosen by agreement between the employer and the price committee of the union. The price to be determined by such "test hand" must be equal to the established hourly rate of the "test hand" multiplied by the number of hours it takes the "test hand" to perform the operation. The hourly rate of the "test hand" will be established by having him perform, without interruption or interference, at least two operations on which piece prices have been satisfactorily settled. The amount earned by the "test hand" on these operations, divided by the number of hours consumed, will determine the established hourly rate of the "test hand." In the event that the employer and the price committee cannot agree on a "test hand," they will each select one, and the price will be established as the average of the two test prices thus determined.

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The employer will continue to set rates for piece-work operations. It is agreed that any dispute over such rates may be taken up through the regular grievance procedure. Any agreed-upon adjustment in piece rates shall be retroactive to the start of the work on that operation.

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When it is believed that a piece rate is out of line with the general piece-rate structure, a new piece rate will be set upon request by either party. No change in product or methods of operation may be instituted until piece rates have been agreed upon.

*Revision of rates.*—Union agreements which provide incentive wages sometimes specify that, after a rate has been established which is satisfactory to the union, there will be no change in rate on that operation unless there is a significant change in product or methods of operation. This protects employees by assuring them that if they increase their work effort as a result of the incentive, the employer will not subsequently decrease the piece rate to bring their earnings back to their former level. In order to reduce a piece rate the employer must prove that there is some reason, other than the increased effort of the workers, which justifies a change in rate.

If more efficient machinery or other productive methods are introduced by the employer, resulting in a higher output per worker, the union agreement often provides that the new rate shall yield the worker the same or higher actual earnings than before the change was made.



In a few cases the union and the employer have agreed that a definite percentage of the saving in labor cost—for example, one-third of the difference between the old rate and the new rate—is to go to the workers when improved machinery or methods are introduced. In other cases, although no definite percentage is specified, the negotiated new rates result in increased earnings on the improved operation, even though the piece rate is lower.

Piece-work or bonus rates on any particular operation will not be changed unless there is a significant change in the material or method of operation. When improved methods are introduced, new piece rates may be agreed on, but one-third of the savings in cost (difference between the new rate and the old one) shall be added to the new rate to increase the earnings of the individual operators.

*Guaranteed minimum pay.*—When a worker's average efficiency has been established through experience on the job, any significant drop in his earnings probably would be due to causes beyond his control. If because of machinery break-down, failure to receive work, or other causes, an employee is prevented from achieving an expected rate of production, many agreements provide that a part of this be made up by the employer through guaranteed minimum pay. (Under the Fair Labor Standards Act employers subject to the act are required to make up employees' piece earnings which fall below the hourly minimum rate set for their particular industry. This would also be the case for employers covered by State minimum-wage laws.)

Another form of guaranteed minimum pay found in some agreements requires that piece rates be revised upward if the average earnings of all the workers on the job do not reach a specified hourly, daily, or weekly minimum. A somewhat similar purpose is accomplished by requiring that the piece rates shall be adequate to insure that a specified proportion of the workers earn the established wage or above.

All employees will be paid on the basis of piece rates, but if it is established that average earnings in any operation fall below \$— per hour in any pay period, the piece rate on that operation will be revised to bring the average earnings of all employees engaged in the operation up to this amount.

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Piece rates shall be sufficient to enable at least 80 percent of those working on the type of merchandise in question to earn at least the minimum wage on the conditions specified. If 80 percent do not earn the minimum wage the rate shall be adjusted, under the provisions of section —. If, however, 80 percent or more of the workers of any craft earn the minimum wage, it shall be deemed that the piece rate is correct and the employer shall not be required to pay up to the minimum to the minority not earning the minimum.

### *Production Standards and Speed-Up*

Regardless of whether wages are computed by time rates or incentive rates, there is usually some determination of the expected production of "average" employees on each operation. Job or production standards may be based on past experience for similar work,



with "rule of thumb" allowance for new variations. There is, however, a growing tendency to determine production standards on new or changed operations through more precise analysis of the elements of each operation, with time studies of "average" workers and estimated allowances for fatigue, rest periods, machine stoppages, waiting for materials, etc. Although some unions have resisted the introduction of time-study methods, others have accepted time studies as necessary but have erected safeguards to prevent grievances from arising.

The principal safeguard placed on time studies in union agreements is the provision that the union is to be consulted on the choice of the workers to be timed and the conditions under which the time study is to be made. This eliminates complaints by workers that above-average workers were timed or that too-ideal work arrangements were employed in the time study. If the worker who is being timed is supplied with an uninterrupted flow of material, for example, the union may contend that in practice workers have to go and get certain materials or often wait for material to be brought to them.

Another safeguard found in some agreements is the elimination of secret time studies; that no operation may be timed unless the worker on that operation and the union are informed of the study and its purpose. Furthermore, in some cases additional time studies are prohibited until there has been a change in the operation sufficient to justify clearly a change in the production standards of that operation. This obviates the possibility of a continuing check-up by the employer to determine whether there is a slackening of maximum speed on the operation.

There are various ways in which unions may actively participate in time studies. The union may post observers while the study is being made. It may wait until the results of the time study have been announced, then protest if it disagrees with the findings and post observers when a restudy is made. Or the union may make independent time studies and check them against the time studies made by the employer.

The union will be informed of all time studies in advance. There will be mutual agreement between the union and the time-study department as to the worker to be timed and the conditions of the study and the union may post observers while the study is being made. Any disagreement over the time study will be taken up through the regular grievance procedure.

All labor standards shall be established in conformity to present time-study practices of the company, which allow due consideration for fatigue and the speed at which employees work, such standards shall be kept available in the department in which the operation is performed and shall be proper subjects for negotiation under this agreement.

Where practicable, new or revised standards will be posted 48 hours before they become effective. If the union protests the standard before it becomes effective,

the problem shall be reduced to writing and negotiated in the regular manner. The standard in question may or may not be made effective during such negotiation, at the option of the company. Any adjustment in the standard resulting from such negotiation shall be made effective and retroactive to the first date on which the standard was effective after the written petition was presented to the management.

It is mutually agreed that individual production output is dependent upon the working conditions surrounding the operation, the ability of the workers, and the effort put forth by the workers. It is desired that the average employee earn between a 70 and a 90 B hour per shift.

### *Adjustment of Wages to Cost of Living*

Only a relatively small proportion of union agreements include provisions for the adjustment of the wage level during the life of the agreement. Since most agreements remain in effect for a limited period, usually 1 year, under normal conditions it is expected that the agreed wages can continue during that period without working undue hardship on either party. In abnormal situations, such as periods of fluctuating prices or uncertain business future, a larger number of agreements include provisions for short-time wage adjustments during the life of the agreement.

Wage-adjustment plans which have been used in agreements are of two general types—permissive and automatic. The permissive plans authorize the opening of negotiations for new wage rates at stated intervals during the life of the agreement, or when either party can demonstrate a significant change in such factors as general economic conditions, cost of living, or prevailing wages. The automatic plans make compulsory a wage change as cost of living, prices of given commodities, or profits fluctuate. Both the permissive and the automatic plans may protect existing wage standards by authorizing pay increases only or by prohibiting decreases below the wage level negotiated at the time the agreement was signed.

*Permissive adjustment plans.*—Wage adjustments as well as changes in other provisions are possible, of course, in any agreement with an indefinite term, since such agreements are reopened upon a stated period of notice by either party. Agreements which are to remain in effect for several years sometimes require new wage negotiations annually. Some agreements provide for a review of the wage rates at intervals, such as every 3 or 6 months. More frequently, however, either party is given the right to reopen the question of wage rates whenever it can be established to the satisfaction of both parties that general economic conditions or any of a number of specified matters justify wage readjustments. In order to avoid disputes as to whether or not negotiations should take place, some provisions specify that the request for a wage adjustment can be made only after a stated period of time or after a cost-of-living index shows a change of a specified amount.

Some agreements permit only the union to propose wage negotiations during the life of the agreement. Others specify that either party may demand negotiations for wage adjustments whenever business or economic conditions, cost of living, or change in the competitive position of the employer shall warrant.

If at the end of 6 months from the date of the agreement there is a substantial increase in the cost of living, as indicated by the cost-of-living index published by the Department of Labor, the employees may present a request for an adjustment of said wages, and in the event of a disagreement as to such request, the question shall be arbitrated.

Due to the unsettled state in world affairs it is agreed that should the cost of living shown an increase of 5 percent or more, then only shall the union have the right, upon 15 days' notice, to open the wage schedule of this agreement for adjustment, when conferences shall be held and any decision reached shall become effective immediately.

Should the union invoke this clause and an increase in wages be granted by reason thereof, then the company, should the cost of living show a decline of 5 percent or more, shall have the right to ask for a revision in the wage schedule; however, any revision under this clause shall not be lower than the rates herein established.

*Automatic wage-adjustment plans.*—Automatic wage-adjustment plans are designed to adjust wage rates to fluctuations in the purchasing power of wages or in the ability of the particular business enterprise to pay higher or lower wages. The amount of the wage change may or may not be specified, but all such provisions make mandatory a change in wages whenever certain other changes have taken place.

Most unions have been reluctant to include automatic wage-adjustment plans based on a cost-of-living index in their agreements, on the ground that such plans freeze workers' standard of living at the existing level. The purpose of adjustments in money wages to changes in the purchasing power of the dollar is to maintain at a fixed level during the life of the agreement the amount of goods and services the wages will buy. This is effected by gearing wages to a cost-of-living index. If wage rates are keyed to cost of living, then "real wages"—the amount of goods and services which the worker can buy—remain the same.

It should be noted that provisions which automatically tie wages to a cost-of-living index do not eliminate all fluctuations in real wages, since at best the wage change can be made retroactive only to the date for which the index was computed and not to the exact time of the changes in cost of living. If the index has risen sharply, the payment of back wages may be difficult for the company to meet. If the index has fallen, there is the problem of collecting from the workers a proportion of the wages already received and spent. From the practical point of view it is virtually impossible to avoid the lag in



real wages brought about by dating the wage adjustments from the date of publication of the index.

In addition there is the question of how well a general index measures actual changes in the cost of living of a specific group of workers in a given locality. Workers with lower incomes will find their living costs rising faster than this index if food prices are going up more rapidly than the prices of other items, because a larger proportion of their income goes to buy food. Furthermore, changes in retail prices in a given community may or may not follow the changes taking place in the cities for which cost-of-living indexes are available.

Changes in the cost of living are usually expressed in percentage terms. A comparable percentage increase (or decrease) in wages will, therefore, restore the former real earnings. A flat increase in cents or dollars has the effect of narrowing the wage margin between the lower and higher paid workers. Hence, if the allowed flat increase is just equivalent to the percentage necessary to restore the real wages of the lowest-paid workers, only a part of the higher-paid workers' income is protected. The purchasing power of the remainder of the better-paid workers' earnings will fall with the rise in living costs.

Most frequently the agreements which provide automatic adjustment of wages according to cost of living provide that the change in wages shall be the same percent as the change in cost of living. Some agreements provide that wage changes may take place only at specified intervals; others, when the cost-of-living index reaches a specified amount; and still others provide for simultaneous wage adjustment with every published change in the cost-of-living index.

In order to allay concern on the part of employees as to the rise in the cost of living, automatic increase in employee earnings will be made as the cost of living rises. The index taken for the cost of living will be the monthly index for [area] published by the Department of Labor of the United States Government. This plan provides that if the cost of living goes up, corresponding increases will be made in employee earnings. If the cost of living decreases, adjustments will be made downward, but will not go below the standard of employee earnings now in effect.

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In view of unsettled economic conditions which are apt to result in violent changes in the cost of living, it is hereby agreed: That the piece rates paid to piece workers and hourly wages paid to week workers shall be revised periodically in accordance with the changes in the cost of living as computed and published by the United States Department of Labor. That whenever the cost-of-living index registers a change equal to or exceeding 5 percent since the last published figure prior to the signing of the agreement, an automatic change in the piece rates or wages shall be instituted on the date 1 month following the publication of the index by the Department of Labor: That thereafter such adjustments should take place whenever, in the aggregate, the changes in the cost of living amount to or exceed 5 percent from the date of the latest wage adjustment.

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The corporation will recognize an advance in the cost of living, as evidenced by labor statistics for the ——— area published by the Department of Labor for



low-salaried workers, on the following basis: If during this July-December period, the cost of living has advanced beyond the cost of living on [date], the corporation will make an adjustment for the ensuing period January 1-June 30, as follows: When the percentage advance is sufficient, calculated on the basis of 40 cents per hour, to turn out 1 cent, all wages will be advanced 1 cent per hour. Example: Assuming the cost of living advanced  $2\frac{1}{2}$  percent during the period July-December, then for the period January-June wages would be advanced 1 cent per hour, because 40 cents per hour times  $2\frac{1}{2}$  percent is 1 cent. There shall be no increase in wages if the percentage advance in living is less than one-half cent; the increase shall be the nearest even cent.

## Defense Activities

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### UTILIZATION OF PLANT FACILITIES UNDER NATIONAL DEFENSE PROGRAM <sup>1</sup>

THE tempo of defense production has been sharply accelerated during recent months through the extension of multiple-shift operations and increased use of overtime. Many companies which under normal peacetime conditions operated their plants only one shift per day, 5 or 5½ days per week, according to an investigation recently made by the Bureau of Labor Statistics, have extended their operations to two or three shifts per day, 6 and 7 days per week. Except in continuous-process industries, however, there are only a few establishments that operate the plant continuously with four 40-hour shifts.

Wide variations exist in operating schedules among the defense industries and among the individual plants in each of the industries. It appears that further expansion in defense production can be accomplished most easily through a more efficient utilization of present plant facilities on evening and night shifts. The principal deterrents at the present time are (1) shortages of skilled workers, (2) shortages of supplies, parts, and materials, and (3) lack of balance among production departments. These problems are being met through training programs, upgrading of workers, exercise of priorities and allocation of materials, increased subcontracting, and expansion of "bottleneck" departments.

#### *Shift Operations in Identical Plants*

That this development toward fuller utilization of plant facilities, which began in the last 6 months of 1940, has continued is shown by a comparison of the operations of 299 identical plants in selected defense industries between December 1940 and June 1941. Total employment in these 299 plants rose from 431,300 in December to 560,300 in June (a gain of 30 percent). However, the forces working on the second and third shifts were increased by 46 percent and 67 percent, respectively, during the period. Whereas, in December, 30 of the 299 plants were operating one shift per day, in June only 13 of the plants were still on a single-shift basis. Aggregate hours worked per week

<sup>1</sup> Prepared by Morris Levine, assisted by Vincent W. Casey, of the Bureau's Division of Employment Statistics.

in these plants during June increased 6,800,000 over December 1940, a gain of 35 percent. Between December 1940 and June 1941 the proportion of persons working overtime in the reporting plants rose from 67.3 to 73.0 percent, and the average overtime per overtime worker increased from 8.1 to 9.6 hours per week. Although this overtime was a significant factor in increasing defense production in the surveyed plants, by far the greatest proportion of the increase in total hours worked resulted from building up the total plant forces.

Marked gains between December and June in total man-hours worked occurred in all of the industries covered, with the single exception of aluminum manufactures where priority rulings resulted in curtailment at many aluminumware plants. The largest percentage gain in man-hours worked occurred in the explosives industry. Reports from 6 explosives plants, manufacturing a substantial portion of all military explosives, indicated an increase of over 200 percent in man-hours worked per week. In private shipbuilding, 39 reporting establishments employing over half the estimated total wage earners in the industry showed an increase of 56.5 percent in man-hours worked per week. Increases ranging from 60 to 25 percent were reported by plants in the machine-tool accessories, ammunition, firearms, engines, electrical machinery and equipment, and machine-tool industries.

The percentage of the total plant force in the reporting establishments working on extra shifts increased from 25.4 in December 1940 to 29.6 in June 1941. The heaviest second- and third-shift schedules were in explosives and ammunition plants where almost half the workers were employed on other than the main shift during June. In explosives, new plants that had been only partly staffed in December went into full production by June, and the percentage of workers on extra shifts increased from 28 in December to 48 in June. In machine-tool accessories, brass, bronze and copper products, engines, and machine-tool plants, between 30 and 40 percent of the workers were employed on other than the day shift during June. In plants manufacturing firearms, only 15 percent of the total plant force was engaged on the second shift. Third-shift operations in this industry were not significant. Priority rulings forced aluminumware plants to curtail extra-shift operations, and the aluminum industry as a whole showed a decline between December and June in extra-shift employment.

Comparison of the distribution of employment by shift in the 299 reporting plants between December 1940 and June 1941, by industry, is shown in table 1.

TABLE 1.—Comparison of Employment, by Shift, in 299 Selected Plants in December 1940 and June 1941, by Industry

Industry and shift schedule	Number of plants		Total employed				Percent of employees, on—					
			Number		Percent		First shift		Second shift		Third shift	
	December	June	December	June	December	June	December	June	December	June	December	June
All industries.....	299	299	431,256	560,256	100.0	100.0	74.6	70.4	19.2	21.6	6.2	8.0
1-shift plants.....	30	13	12,693	5,527	2.9	1.0	2.9	1.0				
2-shift plants.....	88	87	76,409	99,554	17.7	17.7	14.7	14.2	3.0	3.5		
3-shift plants.....	181	199	342,154	455,175	79.4	81.3	57.0	55.2	16.2	18.1	6.2	8.0
Aluminum manu- factures.....	12	12	11,982	12,178	100.0	100.0	65.0	66.4	22.1	21.9	12.9	11.7
1-shift plants.....												
2-shift plants.....	6	2	2,340	534	19.5	4.4	16.6	3.6	2.9	.8		
3-shift plants.....	6	10	9,642	11,644	80.5	95.6	48.4	62.8	19.2	21.1	12.9	11.7
Ammunition.....	10	10	(1)	(1)	100.0	100.0	64.1	55.4	22.3	29.9	13.6	14.7
1-shift plants.....	2	2	(1)	(1)	1.4	1.3	1.4	1.3				
2-shift plants.....	2	2	(1)	(1)	5.0	1.8	4.9	1.7	.1	.1		
3-shift plants.....	6	6	(1)	(1)	93.6	96.9	57.8	52.4	22.2	29.8	13.6	14.7
Brass, bronze, and copper products.....	54	54	68,607	80,879	100.0	100.0	64.6	61.7	24.5	25.6	10.9	12.7
1-shift plants.....	4	1	1,370	(2)	2.0	(2)	2.0	(2)				
2-shift plants.....	7	7	4,725	5,230	6.9	6.5	6.1	5.6	.8	.9		
3-shift plants.....	43	46	62,512	75,649	91.1	93.5	56.5	56.1	23.7	24.7	10.9	12.7
Electrical machin- ery, apparatus, and supplies.....	107	107	174,764	220,073	100.0	100.0	77.7	71.9	17.0	20.6	5.3	7.5
1-shift plants.....	14	6	7,893	3,315	4.5	1.5	4.5	1.5				
2-shift plants.....	19	22	12,717	18,009	7.3	8.2	6.0	6.7	1.3	1.5		
3-shift plants.....	74	79	154,154	198,749	88.2	90.3	67.2	63.7	15.7	19.1	5.3	7.5
Engines, other than aero.....	14	14	14,240	19,116	100.0	100.0	70.4	66.7	21.4	23.6	8.2	9.7
1-shift plants.....	1		(2)	(2)	(2)	(2)	(2)	(2)				
2-shift plants.....	3	2	2,332	1,633	16.4	8.5	14.3	7.1	2.1	1.4		
3-shift plants.....	10	12	11,908	17,483	83.6	91.5	56.1	59.6	19.3	22.2	8.2	9.7
Explosives.....	6	6	(1)	(1)	100.0	100.0	72.2	52.2	18.7	25.4	9.1	22.4
1-shift plants.....			(1)	(1)								
2-shift plants.....		1	(1)	(1)		2.2		1.8		.4		
3-shift plants.....	6	5	(1)	(1)	100.0	97.8	72.2	50.4	18.7	25.0	9.1	22.4
Firearms.....	6	6	(1)	(1)	100.0	100.0	86.9	84.7	13.1	15.1		.2
1-shift plants.....	1		(1)	(1)	2.3		2.3					
2-shift plants.....	5	4	(1)	(1)	97.7	89.9	84.6	75.8	13.1	14.1		
3-shift plants.....		2	(1)	(1)		10.1		8.9		1.0		.2
Machine tools.....	38	38	44,183	54,208	100.0	100.0	73.9	70.2	21.8	24.4	4.3	5.4
1-shift plants.....	4	1	(2)	(2)	(2)	(2)	(2)	(2)				
2-shift plants.....	21	23	21,868	30,176	49.5	55.6	41.0	43.1	8.5	12.5		
3-shift plants.....	16	14	22,315	24,032	50.5	44.4	32.9	27.1	13.3	11.9	4.3	5.4
Machine - tool ac- cessories.....	13	13	3,619	5,570	100.0	100.0	69.5	59.6	24.8	26.6	5.7	13.8
1-shift plants.....	2		341		9.4		9.4					
2-shift plants.....	5	7	1,479	2,675	40.9	48.0	32.1	37.9	8.8	10.1		
3-shift plants.....	6	6	1,799	2,895	49.7	52.0	28.0	21.7	16.0	16.5	5.7	13.8
Shipbuilding.....	39	39	86,581	127,241	100.0	100.0	79.4	77.1	17.1	17.9	3.5	5.0
1-shift plants.....	5	3	1,109	1,025	1.3	.8	1.3	.8				
2-shift plants.....	20	17	22,072	30,247	25.5	23.8	20.6	19.0	4.9	4.8		
3-shift plants.....	14	19	63,400	95,969	73.2	75.4	57.5	57.3	12.2	13.1	3.5	5.0

<sup>1</sup> Employment figures in these industries are not published. Summary data are available under pledge of confidence to Federal Government agencies and to officials of the reporting companies.

<sup>2</sup> Figures are not shown separately to avoid disclosing individual plant reports. Included in 2-shift plants.

### Shift Operations, June 1941, in All Plants Reporting

The comparison of operations in December 1940 and June 1941 was restricted to 299 identical plants for which data for both periods were available. However, reports covering June operations were received from 935 plants employing over 1,300,000 wage earners, thereby making possible a more detailed analysis of operating schedules in



June 1941. Data covering these 935 plants, comprising a broad cross section of defense industries, are presented in table 2. They demonstrate one aspect of the manner in which American industry is meeting the challenge to increase defense production.

TABLE 2.—Shift Distribution of Employees in All Reporting Plants, by Industry, June 1941

Industry and shift schedule	Number of plants	Total employees		Percent of employees on		
		Number	Percent	First shift	Second shift	Third shift
All industries.....	935	1,312,498	100.0	64.2	22.7	13.1
Plants operating 1 shift.....	76	14,390	1.1	1.1		
Plants operating 2 shifts.....	217	149,814	11.4	9.2	2.2	
Plants operating 3 shifts.....	642	1,148,294	87.5	53.9	20.5	13.1
Aluminum manufactures.....	22	15,474	100.0	64.9	22.2	12.9
Plants operating 1 shift.....	3	282	1.8	1.8		
Plants operating 2 shifts.....	3	659	4.3	3.6	.7	
Plants operating 3 shifts.....	16	14,533	93.9	59.5	21.5	12.9
Ammunition, explosives, firearms, and ordnance materials.....	118	113,560	100.0	63.4	23.8	12.8
Plants operating 1 shift.....	12	1,435	1.2	1.2		
Plants operating 2 shifts.....	35	26,041	22.9	19.2	3.7	
Plants operating 3 shifts.....	71	86,084	75.9	43.0	20.1	12.8
Blast furnaces, steel works, and rolling mills.....	196	471,503	100.0	53.1	26.0	20.9
Plants operating 1 shift.....	2	562	.1	.1		
Plants operating 2 shifts.....	9	4,805	1.0	.7	.3	
Plants operating 3 shifts.....	185	466,136	98.9	52.3	25.7	20.9
Brass, bronze, and copper products.....	58	83,962	100.0	62.2	25.3	12.5
Plants operating 1 shift.....	1	136	.2	.2		
Plants operating 2 shifts.....	7	5,094	6.1	5.2	.9	
Plants operating 3 shifts.....	50	78,732	93.7	56.8	24.4	12.5
Cars, electric and steam railroad.....	47	23,962	100.0	83.8	11.6	4.6
Plants operating 1 shift.....	20	3,004	12.5	12.5		
Plants operating 2 shifts.....	11	4,756	19.9	18.1	1.8	
Plants operating 3 shifts.....	16	16,202	67.6	53.2	9.8	4.6
Chemicals.....	90	60,897	100.0	70.3	16.4	13.3
Plants operating 1 shift.....						
Plants operating 2 shifts.....						
Plants operating 3 shifts.....	90	60,897	100.0	70.3	16.4	13.3
Electrical machinery, apparatus, and supplies.....	117	227,224	100.0	72.0	20.6	7.4
Plants operating 1 shift.....	10	3,850	1.7	1.7		
Plants operating 2 shifts.....	25	21,538	9.5	7.6	1.9	
Plants operating 3 shifts.....	82	201,836	88.8	62.7	18.7	7.4
Engines, other than aero.....	17	26,383	100.0	66.9	23.6	9.5
Plants operating 1 shift.....						
Plants operating 2 shifts.....	2	1,633	6.2	5.1	1.1	
Plants operating 3 shifts.....	15	24,750	93.8	61.8	22.5	9.5
Locomotives.....	10	14,214	100.0	75.9	19.7	4.4
Plants operating 1 shift.....						
Plants operating 2 shifts.....	5	1,594	11.2	10.1	1.1	
Plants operating 3 shifts.....	5	12,620	88.8	65.8	18.6	4.4
Machine tools.....	102	84,997	100.0	69.6	24.5	5.9
Plants operating 1 shift.....	5	1,179	1.4	1.4		
Plants operating 2 shifts.....	64	40,112	47.2	36.4	10.8	
Plants operating 3 shifts.....	33	43,706	51.4	31.8	13.7	5.9
Machine-tool accessories.....	39	12,356	100.0	69.8	23.0	7.2
Plants operating 1 shift.....	3	93	.8	.8		
Plants operating 2 shifts.....	24	7,533	60.9	48.8	12.1	
Plants operating 3 shifts.....	12	4,730	38.3	20.2	10.9	7.2
Shipbuilding.....	77	146,814	100.0	77.5	17.8	4.7
Plants operating 1 shift.....	20	3,849	2.7	2.7		
Plants operating 2 shifts.....	32	36,049	24.5	19.9	4.6	
Plants operating 3 shifts.....	25	106,916	72.8	54.9	13.2	4.7
Smelting and refining.....	42	31,152	100.0	70.0	16.6	13.4
Plants operating 1 shift.....						
Plants operating 2 shifts.....						
Plants operating 3 shifts.....	42	31,152	100.0	70.0	16.6	13.4

Multiple-shift operating schedules were predominant in all of the industries covered during June 1941. Only 76 of the 935 reporting establishments were operating exclusively on one shift per day. These

were principally smaller establishments and together accounted for only 1 percent of all the workers covered. In the blast furnaces, steel works, and rolling mills, in the manufacture of chemicals, and in the smelting and refining industries, continuous manufacturing processes are used and virtually all of the plants operate 3 shifts per day, 7 days per week. Most of these plants have 4 shifts of workers which are rotated in order to keep the plant in operation continuously 3 shifts per day, without lengthening the hours of the individual worker. Average hours worked per wage earner in these industries, therefore, are around the 40-per-week level. In the manufacture of machine tools and machine-tool accessories, inability to obtain sufficient numbers of skilled workers resulted in many plants operating two long shifts in preference to three shifts per day. In this industry, many 2-shift plants are operating in excess of 20 hours per day, thereby necessitating an average of from 14 to 15 hours of overtime per week for each worker.

Considerable variation appeared among industries in the extent to which extra shifts were staffed. The largest percentage of employees on other than the day shift occurred in blast furnaces, steel works, and rolling mills, where 47 percent of the wage earners were employed on evening or night shifts. In contrast, in the industries manufacturing railway cars, locomotives, electrical machinery and equipment, in private shipyards, and in chemical plants, less than 30 percent of all the workers were on extra-shift work.

Some qualifications must be kept in mind with respect to the use of employment by shifts as an indication of the degree to which plant capacity is actually used. Except in unusual instances, the labor force is not equally divided among the shifts. For example, in steel mills operating continuously at full capacity for three shifts per day, half of the total plant force is usually occupied on the day shift. Work supplementary to basic production (such as repairs, maintenance, and unloading materials) accounts for the large proportion of workers on the first shift. Also it may be that the operations of finishing departments depend upon the production of ingots, and therefore these departments may not be required to operate three full shifts in order to handle the entire ingot output. In the steel mills, the smaller number of workers on the second and third shifts should not be interpreted as meaning that output could be increased significantly, unless ingot production could be expanded to the point where finishing departments could operate three full shifts.

In machine-tool plants, assembly departments are geared to the output of machine departments, and, in many instances, need not operate more than one shift per day until machine departments are expanded. Many establishments in this industry have expanded their general plant capacity by subcontracting parts of their machine work.

In private shipyards, over three-fourths of all the workers are employed on the day shift. Comments from many reporting firms in this industry indicate that the extension of night work beyond that done under cover is hardly feasible, as the lack of satisfactory lighting lowers efficiency and increases the danger of accidents. In some shipyards, however, substantial numbers of workers were employed on evening and night shifts.

Despite difficulties such as those mentioned above, there undoubtedly exist widespread opportunities to increase defense production through fuller utilization of present plant facilities on second and third shifts. Two programs which will help toward this goal are (1) widespread training to develop an adequate supply of skilled workers and (2) more subcontracting, particularly of items creating "bottlenecks" in plants with unbalanced production.

An analysis of the reports indicates that the largest plants have made the greatest progress in increasing plant use through the development of multiple shifts. As shown in table 3, the group of plants with the largest number of wage earners (5,000 or over) employed nearly 40 percent of their forces on extra shifts. About half of the plants in this group are in the blast-furnace, steel-works, and rolling-mill industry, and normally operate substantial second and third shifts. In the other size groups, the percentage of wage earners on second and third shifts is progressively less as the size of plant declines. In the smallest plants (250 wage earners or less) only 21.7 percent of the wage earners were employed outside the main shift.

In the two largest groups (over 5,000 wage earners and from 1,000 to 5,000) all of the 317 plants were operating on a multiple-shift basis. On the other hand, 56 of the 222 plants with less than 250 wage earners operated one shift per day.

The difficulties encountered in expanding production through extra-shift operations are probably multiplied in the case of small plants. In many instances, the problems of training adequate numbers of skilled workers and obtaining sufficient materials and equipment may be insurmountable for small firms, without special action on the part of defense officials.

TABLE 3.—Shift Distribution of Employees by Size of Plant, June 1941

Size of plant	Number of plants	Total wage earners		Percent of wage earners on—		
		Number	Percent	First shift	Second shift	Third shift
All plants.....	935	1,312,498	100.0	64.2	22.7	13.1
Over 5,000 wage earners.....	49	488,129	37.2	60.6	23.5	15.9
1,000 to 5,000 wage earners.....	268	580,301	44.2	63.9	23.6	12.5
500 to 1,000 wage earners.....	209	146,498	11.2	71.2	19.3	9.5
250 to 500 wage earners.....	187	67,369	5.1	72.1	19.5	8.4
Under 250 wage earners.....	222	30,201	2.3	78.3	15.6	6.1



*Extent of Overtime*

Overtime continued to be an important factor in increasing defense production. It was most widespread in the machine tools and accessories industries where virtually all the workers worked overtime, averaging 13 hours weekly at the time of the June survey. In private shipyards more than 80 percent of the workers averaged 11 hours of overtime during the week, and in plants manufacturing firearms, ammunition, explosives, and ordnance materials, an average of 9½ hours of overtime was worked by 74 percent of the wage earners during the week. In continuous-process industries, the use of staggered shifts eliminates, to a large extent, the need for overtime. Consequently in blast furnaces, steel works, and rolling mills, in smelting and refining, and in the chemical industry, only 20 to 30 percent of the wage earners worked overtime.

TABLE 4.—*Weekly Hours and Overtime of Workers in All Reporting Plants, June 1941*

Shift schedule and plant hours per week	Number of plants	Total number of wage earners	Average weekly hours per wage earner	Percent of wage earners working overtime	Average weekly hours of overtime per overtime worker
All plants.....	935	1,312,498	43.6	50.8	9.4
1-shift plants.....	76	14,390	43.6	47.6	8.7
40 to 49.9 hours.....	59	10,962	41.6	39.8	5.7
50 to 59.9 hours.....	14	2,519	49.5	72.9	14.6
60 hours and over.....	3	909	52.1	71.1	12.5
2-shift plants.....	217	149,814	50.8	82.6	13.2
70 to 79.9 hours.....	7	3,135	38.6	22.2	6.8
80 to 89.9 hours.....	42	17,712	49.2	49.9	5.4
90 to 99.9 hours.....	35	26,632	45.5	76.0	9.2
100 to 109.9 hours.....	32	14,104	51.3	93.5	12.6
110 to 119.9 hours.....	48	49,789	52.0	88.4	14.2
120 to 129.9 hours.....	22	13,350	51.1	92.1	14.2
130 to 139.9 hours.....	19	10,311	56.7	97.5	17.9
140 hours and over.....	12	14,781	55.5	97.2	17.4
3-shift plants.....	642	1,148,294	42.7	46.6	8.6
110 to 119.9 hours.....	3	3,180	40.4	40.3	6.3
120 to 129.9 hours.....	50	32,178	40.3	40.0	7.0
130 to 139.9 hours.....	46	54,626	43.1	64.4	7.0
140 to 149.9 hours.....	90	95,222	46.2	76.3	9.0
150 to 159.9 hours.....	39	44,245	44.8	68.5	9.4
160 hours and over.....	414	918,843	42.3	41.7	8.6

The average workweek for the individual worker in a multiple-shift plant is dependent to a large extent on whether the plant or department in which he is employed operates 2 or 3 shifts per day (see table 4). Thus, the average worker in 2-shift plants worked nearly 20 percent more hours per week than his fellow worker in 3-shift plants. The longer workweek for workers in 2-shift plants resulted from the lengthening of shifts by the use of overtime, as contrasted with 8-hour shift schedules in 3-shift plants. Overtime, therefore, was most extensive in 2-shift plants, where 82.6 percent of all the workers worked an average of 13.2 hours of overtime during the



week. In 3-shift plants, 46.6 percent of the workers averaged 8.6 hours of overtime during the week, a considerable portion of this overtime being worked in departments which operated 2 long shifts.

Although some 2-shift plants reported operations extending as long as 140 hours during the week, actual production time usually occupied from 110 to 120 hours in plants operating long shifts, as shown by the average hours worked per week in these plants. In 3-shift plants operating in excess of 150 hours during the week, average hours per worker declined, indicating the use of four shifts of workers to achieve continuous operation.

### *Factors Preventing Shift Expansion*

Considerations which prevented expansion of second and third shifts were reported by 670 of the 935 surveyed plants. The most common deterrent was a reported shortage of skilled workers. However, while 343 plants reported difficulties in securing adequate numbers of skilled workers, only 76 indicated it as the exclusive consideration. Other factors operated to prevent expansion in the remaining cases. Thus 75 reported shortage of skilled workers in combination with shortages of material and equipment, and 66 reported a combination of shortage of skilled workers, of supervisory personnel, and of materials and equipment. Shortage of materials or equipment was reported by 355 plants, 138 of these indicating it as the sole factor preventing expansion of extra-shift work. Lack of orders, legal restrictions, or the fact that present schedules are adequate under existing contracts may be considered as primary causes preventing expansion, and were reported by a total of 212 plants.

In machine-tool plants, the skilled-worker shortage was particularly acute, as shown by the fact that 28 plants reported it as the only deterrent to expansion and 48 plants reported it together with other factors. The principal factor preventing expansion in brass, bronze, and copper plants was shortage of materials or equipment. In this industry, 22 plants stated that the above shortages were the only factors and 22 others indicated that materials and equipment shortages in combination with other reasons prevented expansion of evening and night shifts. In the electrical industry, many plants employ large numbers of female workers; legal restrictions such as maximum hours and night-work laws for women prevented the expansion of second and third shifts in 21 of the reporting establishments. Other plants in this industry were affected by shortages of skilled workers and of materials and equipment.

## VOCATIONAL TRAINING FOR DEFENSE INDUSTRIES

THE shortage of certain types of workers necessary for the defense industries became evident almost as soon as the Nation embarked upon the defense program, and some communities which had been experiencing widespread unemployment soon found their supplies of certain workers, particularly in the metal trades and armament industries, exhausted. The vocational training of additional workers to meet defense needs therefore became very important. A recent study by the Division of Research and Statistics, Bureau of Employment Security,<sup>1</sup> shows the extent to which vocational-education schools and the industries themselves have organized training courses for defense workers.

Shortages of skilled workers were found in the industries in which the need for increased production was greatest. The machine-tool industry, except for the year 1937, had been operating below capacity for more than a decade; the shipbuilding industry had been inactive for years; the aircraft industry, although it had been expanding prior to the defense program, employed relatively few workers; and ordnance had not been produced in any quantities for years. As a result of the curtailed activities in these industries, their skilled workers had transferred to other industries and in many cases had lost their special skills.

In June 1940, Congress, recognizing that other means than recruiting would be necessary to augment the supply of workers, appropriated \$15,000,000 for a training program to be conducted under the supervision of the United States Office of Education. This amount was supplemented by \$60,500,000 in October of that year and in July 1941 more than \$100,000,000 was appropriated to continue the work another year.

Many of the skilled occupations in which there is a shortage of labor require long apprentice training. The public vocational schools, however, are equipped to provide refresher training for skilled workers whose skills became rusty from disuse in the depression years, so that they can return to their skilled occupations. In addition the schools can train workers for less skilled occupations, with the result that large numbers in the untrained labor reserve are converted into workers with some skill. The shortage of labor has also stimulated training within industry for new employees and unskilled workers, and also for more experienced workers in preparation for more highly skilled jobs.

Although nearly 2 million more workers were employed in manufacturing industries in June 1941 than a year earlier, with prospects of equal or greater gains in the next 12 months, the demand for

<sup>1</sup> United States Social Security Board. *Social Security Bulletin*, August 1941: Vocational Training for Defense.

certain types of workers continues to exceed the supply. The shortages as reported by public employment offices in April 1941 were exceptionally acute for most aircraft, metal-trades, and shipbuilding occupations.

### *Defense Training Program*

The initial congressional appropriation, in June 1940, was for the purpose of opening the public vocational schools for short summer courses, which were at first intended mainly to refresh the skills of unemployed persons who had had previous training, work experience, or particular aptitudes, and to give supplementary training to employed persons to fit them for more highly skilled jobs in defense industries. The second appropriation, in October 1940, allowed the expansion of the original program into a more comprehensive plan, providing for "(a) continuation of the original preemployment refresher and supplementary courses, (b) intensive full- and part-time engineering courses, (c) training of out-of-school rural and nonrural youth, and (d) training of young people on work projects of the National Youth Administration." The United States Office of Education estimated at the outset of the program that the number to be trained was slightly over 1,000,000, but developments have proved this estimate to be too low.

The national defense training program is administered by the United States Office of Education through the respective State boards for vocational education. Before these boards can qualify for Federal funds they must submit their plans for vocational training to the United States Commissioner of Education for approval. This requirement does not apply to the engineering training program, which operates under an arrangement between the Office of Education and the cooperating engineering schools. All State and local defense training programs, with the exception of NYA work projects, are subject to inspection by the Office of Education, and also more recently by special agents belonging to the staff of the Director of Defense Training.

The program is carried on within the States by the State boards, which, with the advice and counsel of advisory committees, determine and approve the courses to be given. These committees, both State and local, have equal representation from labor and management groups, with occasional representation of agriculture in the out-of-school rural and nonrural youth program; representatives of other groups interested in the program are also included as consultants. State and local councils of administrators were recently established for the purpose of coordinating more effectively and efficiently the activities of the various participating agencies.

A more recent development is the establishment of a Labor Supply Branch in the OPM Labor Division, which coordinates the activities



of various governmental units associated with training and other phases of labor supply. The problems created by the demand for workers in different localities are handled by 12 regional labor-supply committees operating under the Labor Supply Branch. The regional representatives of the Bureau of Employment Security serve as chairmen of these committees.

The preemployment refresher training courses and supplementary training courses are open to applicants selected from public-employment-office rolls. In order to improve the opportunities for private employment of WPA workers (who are registered with the employment offices) one-half of those chosen for training are taken from WPA lists, the schools making the final decision on whether the persons referred by these agencies are qualified for training. These courses usually last from 8 to 12 weeks. WPA workers are paid by that agency while being trained.

Enrollment for supplementary training is restricted to persons employed in occupations essential to national defense, and is directed toward teaching these workers additional skills which will qualify them for promotion to higher-grade jobs in defense industries. Such courses are initiated at the request of an employer or a trade-union.

The intensive training program for young persons employed on NYA projects has, since July 1941, been restricted to the occupations approved by the OPM as essential to national defense, while training for nondefense occupations continues as a separate part of the program for training NYA project workers.

The program for out-of-school rural and nonrural youth extends training to youths over 17 but less than 25 years of age. Defense training for these young persons is directed toward providing preliminary training for employment in defense industries, or toward preparation for better service in agriculture as it becomes increasingly mechanized. The program provided originally for preemployment courses offering basic instruction common to farm work and also to defense industry, such as operation, care, and repair of trucks, tractors, and automobiles; metalwork, woodworking, and elementary electricity; and training in specific occupations such as metalwork and machine-shop occupations, the courses having a minimum duration of 8 weeks. The specific occupational courses were separated from the out-of-school youth program on July 1, 1941, and incorporated in the preemployment and refresher program.

In the engineer-training program carried out in accredited engineering colleges and universities, the emphasis is on short, intensive training in highly specialized branches in which there is a demonstrated need for workers. The United States Employment Service often assists in the recruitment of applicants, who may be taken from employed and unemployed persons, and aids in their placement after



completion of the course. For the fiscal year 1941-42 the program was expanded to provide training for chemists, physicists, and production supervisors.

In addition to these courses the Federal Government, through the OPM, has encouraged industry to establish the training-within-industry program. Employers who request it are given assistance by the Training-Within-Industry Division in analyzing training needs and formulating an appropriate program. The emphasis is on the upgrading of workers, by means of which a worker proficient in a skill a grade below that required can be trained in a minimum of time to meet the requirements of the higher skill. Field representatives of the Division assist in determining the jobs most adaptable to upgrading methods, and also advise about the possibilities of breaking down operations requiring a high degree of skill into separate operations for which less highly skilled workers can be quickly trained. By June 15, 1941, this program had stimulated or affected the training programs of 892 companies employing about 1,500,000 workers.

The Division of Labor Standards in the United States Department of Labor has had an important part in the defense training program through its responsibility for the apprenticeship phase of the in-plant training program. By an act of Congress in 1937, the apprenticeship agency, established in 1934, was brought into the Department of Labor and was made responsible for the promotion of apprenticeship on a Nation-wide basis and for the establishment of standards to insure sound trade training for the country's future skilled mechanics. There are at present more than 1,000 apprenticeship programs in operation, most of which operate through joint apprenticeship committees on which management and labor are represented.

### *Function of U. S. Employment Service*

The United States Employment Service was at first largely concerned with the selection of trainees for enrollment in preemployment refresher courses, but now, as a part of the Labor Supply Branch, it plays an important part in meeting the entire labor-supply problem. Through its strategic position in local communities, in addition to acting in an advisory capacity to State and local advisory committees on defense vocational education, the Employment Service is at present responsible "for determining and defining the need for training, to the State and local councils of administrators, the number of workers needed and the occupational requirements to be met by trainees for employment. The Employment Service must also keep all councils of administrators currently informed on labor demand and supply and other labor-market developments. Since it is represented on all councils, the Employment Service is also charged with reviewing and advising on preemployment refresher training proposals

submitted by other sources." The Employment Service has also been carrying out occupational-analysis studies. In cooperation with the Office of Education, a list of 550 occupations for which training may be given has been issued to replace 14 broad industrial classifications under which training was formerly given. Other aids which are being developed relate to job analysis and occupational information. The most important function of the Employment Service, however, is the referral of trainees to jobs upon completion of training.

### *Results of Vocational Training Program*

The totals of enrollments reported since the beginning of the program up to the end of June 1941 were estimated by the Office of Education as follows: Preemployment refresher, 400,000; supplementary, 460,000; engineering, 110,000; out-of-school rural and nonrural youth, 300,000; and NYA, 250,000. The Office of Education reported that as of June 30, 1941, more than 145,000 trainees from preemployment refresher courses had found employment.

The United States Employment Service reported that during the first 12 months of the training program—July 1940 to July 1941—nearly 205,000 applicants referred by the public employment offices were accepted for training in preemployment refresher courses. The number of referrals has increased in recent months as a result of the growing recognition of the need for expanded training activities. The courses attracting the majority of the applicants have been machine-shop courses, aviation services, sheet-metal work, and welding classes.

The proportion of young persons under 25 years of age referred for training has increased and that of persons aged 25 to 44 years has decreased. This was thought to be due to the fact that the older workers who are generally better qualified, are absorbed more readily by expanding industry. The employment-office placements show an increasing tendency among employers to favor the older employees when hiring, probably because they consider that older men are more likely to have had previous experience.

Although in some localities difficulties have been met in establishing training courses, such as lack of adequate training facilities, equipment, and instructors, the program has shown definite progress. In some areas shortages of applicants for courses are developing as a result of the expansion of employment opportunities, causing many workers who would be expected to take training to accept jobs instead of enrolling in training courses. In the Baltimore area, for example, the intense industrial activity has absorbed a large proportion of the employable workers, with the result that shortage of the kind of trainees wanted by local firms is said to be next in importance to the shortage of skilled workers.

In conclusion, it is stated:

Because only a year has passed since the inception of the defense training program, its total effectiveness cannot yet be fully measured. However, some indication of its importance may be gathered from a recent statement by Mr. Sidney Hillman: "Thus far, with local exceptions, it may be said that no wheel in defense industry has failed to turn for lack of the properly qualified man. Continuation of this situation depends \* \* \* upon the adequacy and constant improvement of the arrangements thus far devised to make a trained labor supply available to all defense industries wherever located."

## *Foreign Wartime Policies*

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### EXPANDED POWERS OF CANADIAN WARTIME PRICES AND TRADE BOARD

WITH the passing of Privy Council Orders 6834 and 6835, on August 29, 1941, the Wartime Prices and Trade Board of Canada became the supreme authority on the control of prices, while the regulation of allocations of essential war material became the function of the Wartime Industries and Control Board.<sup>1</sup>

The growing complexities of the regulations governing the Dominion Wartime Prices and Trade Board and those governing the Department of Munitions had made it advisable to consolidate these provisions, as it had become obvious that certain gaps interfered with the application of these controls.

Division of authority among several price-fixing bodies was judged not to be in the best national interest, and it was decided that the power to fix prices should be exercised only by, or with the concurrence of, the Wartime Prices and Trade Board. Two related orders in council were therefore issued, providing for a new unified control by the Wartime Prices and Trade Board and the Wartime Industries Control Board.

Each board is represented on the other, thus making possible a closer cooperation between the two agencies. The Wartime Industries Control Board, which includes the chairman, all controllers of the Department of Munitions and Supply, and the Director General of Priorities, now includes also the chairman of the Wartime Prices and Trade Board. This latter body has in turn been permanently expanded by the inclusion of the chairman of the Wartime Industries Control Board and the temporary membership of any controller of that board during the period that any action concerning his subject is being discussed. The possibility of any confusion arising from the operation of the two boards is consequently reduced as a result of the improved conditions of their work.

One significant result of the new provisions is to place under the jurisdiction of the Wartime Prices and Trade Board all goods and services not coming within the particular jurisdiction of the Department of Munitions and Supply.

<sup>1</sup> Canadian Labor Gazette, Ottawa, September 1941. The Canadian order of November 1, fixing in general maximum prices for goods and services, was received too late to be summarized in this issue.



### *Price-Fixing Powers*

Another important change in the powers of the Wartime Prices and Trade Board is in the matter of price fixing. That board under section 2 (3) "is given a general control of all Dominion and provincial agencies in relation to price fixing."

This applies to the controls set up by the Federal Government under the Departments of Munitions and Supply, Agriculture, and Fisheries, as well as provincial bodies exercising price control over such commodities as fruit, milk, and vegetables. In practice, the effect will be that all such bodies will continue their present functions and will present their price recommendations for concurrence to the Wartime Prices and Trade Board. In that way greater coordination of national policy and avoidance of conflicting action will result.

Orders fixing or controlling prices made by the controllers of the Department of Munitions and Supply, which relate to matters within their jurisdiction, must now be approved by the chairman of the Wartime Industries Control Board and be concurred in by the Wartime Prices and Trade Board.

### *Installment Buying*

Some provisions in the old regulations regarding installment buying have been eliminated and certain minor modifications have been made by the amending orders. The Wartime Prices and Trade Board's jurisdiction over such buying is emphasized in the new regulations.

### *Summary of Functions*

Under the new regulations the Wartime Prices and Trade Board "can prescribe the conditions of sale of any goods or services, can fix or limit the quantities that may be bought or sold, and, in addition to the power to license, may suspend or cancel a license where, in the opinion of the Board, the licensee has failed to comply with an order of requirement."



## **FURTHER RESTRICTION ON STRIKES IN CANADA**

FOR the better preservation of industrial peace in Canada, the Industrial Disputes Investigation Act <sup>1</sup> was again amended by order in council No. 7307, dated September 16, 1941. Its terms are as follows: <sup>2</sup>

"1. In any case in which a board of conciliation and investigation has submitted its findings to the Minister of Labor and certified copies

<sup>1</sup> P. C. 3495 of November 7, 1939, as amended by P. C. 1708 of March 10, 1941, extended the provisions of the Act "to disputes between employers and employed engaged in the production of munitions of war and the execution of defense projects." (See Monthly Labor Review, January 1940 (p. 44), February 1941 (p. 332), and June 1941 (p. 1391).)

<sup>2</sup> The Canada Gazette, No. 46, Extra (Ottawa), September 19, 1941.

of the same have been delivered to both parties to the dispute, no strike shall take place except subject to and in accordance with the provisions of these regulations.

"2. If it be the desire of the employees to strike or to take a strike vote, they shall before going on strike or taking a strike vote notify the Minister that such is their desire, and upon receipt of any such notice if the Minister is of opinion that a cessation of work would interfere with the efficient prosecution of the war, he may order or direct that a strike vote be taken under the supervision of the Department of Labor upon and subject to such provisions, conditions, restrictions, or stipulations as he may make or impose.

"3. In any case in which the Minister makes an order or direction as aforesaid, all employees who in his opinion are affected by the dispute or whose employment might be affected by the proposed strike shall be entitled to vote, and the voting shall take place within 5 days from the day upon which the Minister received notice that the employees desired to take a strike vote.

"4. Unless a majority of the ballots of those entitled to vote are cast in favor of a strike, it shall be unlawful for any employee to go on strike.

"5. Any employee who goes on strike contrary to the provisions of these regulations and any person who contravenes or fails to comply with any of these regulations or any order or direction made or given by the Minister thereunder, or who incites, encourages, or aids in any manner any employee to go or continue on strike, or any person to contravene or fail to comply with any of these regulations or any order or direction of the Minister thereunder, shall be guilty of an offense and liable on summary conviction to a fine not exceeding \$500 or to imprisonment for a term not exceeding 12 months, or to both fine and imprisonment."



## ALLOWANCES FOR DEPENDENTS IN CANADIAN MILITARY FORCES

UPON mobilization of the Canadian forces, the Dependents' Allowance Board was created within the Department of National Defense, to provide the requisite administrative, clerical, and accounting service for the allowances to dependents of soldiers, airmen, and sailors.<sup>1</sup>

### *Army and Air Force*

Allowances for dependents of men serving in the Army and Air Force of Canada are not paid as a right but are awarded to alleviate

<sup>1</sup> Canadian Welfare Council. *The Administration of Dependents' Allowances to the Military Forces in Canada*. Ottawa, February 1941. (Military Service Memorandum, No. II—1941.)

financial anxieties resulting from enlistment of men having dependents. It is assumed that the enlisted man is directly responsible for his dependents, which responsibility he must meet to the best of his ability before any claim for special allowances can be granted.

Before an enlisted man may claim an allowance, dependency on him before enlistment must be proved, and before he makes a claim for an allowance for his family, he must assign them 15 days' pay (\$20).

Only 3 dependents of any soldier are entitled to allowances. The maximum allowances which may be paid to specified dependents of private soldiers are shown below, together with the minimum pay to be assigned by the soldier.

*Scale of Allowances for Canadian Married Soldiers' Dependents*

Dependents for whom allowance is claimed	Maximum allowance	Minimum assigned pay
Wife only.....	\$35.....	\$20—15 days' pay.
Wife and 1 child.....	\$35 plus \$12.....	\$20—15 days' pay.
Wife and 2 children.....	\$35 plus \$12 plus \$12.....	\$20—15 days' pay.
Wife and 1 parent.....	\$35 (wife).....	\$20 (wife)—15 days' pay.
	\$20 (parent).....	\$ 6 (parent)—5 days' pay.
Wife and 1 brother or 1 sister.....	\$35 (wife).....	\$20 (wife)—15 days' pay.
	\$20 (brother or sister).....	\$ 6 (brother or sister)—5 days' pay.

Allowances varying slightly from those reported above, are paid to a soldier with dependents living in his home who has no wife but who has a female relative responsible for the care and management of his household. Fifteen days' pay (\$20) monthly must also be assigned for such female relative.

Special provisions are made for dependents of divorced soldiers.

### *Navy Allowances*

The Navy regulations for dependents' allowances are somewhat different from those in the Army. Marriage allowances have been granted in the Navy since 1920, the system operating in both peacetime and wartime. The allowance is computed on the basis of the man's daily pay, and is put to his credit; he then assigns the allowance and 15 days' pay to his family.

Allowances for the wives and children of men in the Navy go through the regular accounting scheme of that service. Applications for allowances for dependents other than wives and children are investigated by the Dependents' Allowance Board.

The allowance per day for an officer's wife is \$1, with 25 cents additional for each dependent child, up to and including the fourth. An officer is not obliged to assign his pay, but must allot his marriage allowance.

The allowance for the wife of a rating is 75 cents per day, but the allowances for the children are the same as in the case of an officer.



The rating, however, must assign 15 days' pay to his family. An officer or rating who has no wife receives respectively \$1 or 75 cents when he has one child, with 25 cents for each additional child up to and including the fourth.

Dependent's allowance may be claimed for one dependent only (that is for other than wife or children), and is at the rate of 0.65 cents per day, both for officers and ratings. In no case may the total marriage and dependent's allowance exceed the maximum allowed for a wife and four children.

If an allowance is claimed for a dependent, as well as a marriage allowance, an additional 5 days' pay must be assigned.

If the dependent is the only person receiving an allowance, 15 days' pay must be assigned.

Common-law wives and illegitimate children are not eligible for allowances, and at present no sailor under 22 is eligible for a marriage allowance.



### ADVISORY COUNCIL FOR WORKS AND BUILDINGS IN GREAT BRITAIN <sup>1</sup>

THE Central Council for Works and Buildings was recently created in Great Britain as an advisory agency to the Minister of Works. Members of this body, composed of independent and experienced men, were selected by the Minister of Works who is responsible for the conduct and regulation of the building and civil-engineering industries. Under the changing conditions of wartime, the Minister must secure the highest degree of efficiency and output, and therefore he has found it desirable to have such a council.

No change is intended in the relations between associations and organized interests and the Minister, and there is to be no interference with the existing arrangements for fixing wages and conditions of employment and settling disputes.

As far as possible, the Minister will consult the council on all proposals affecting the two industries on matters of principle or policy, before taking action. The council may take the initiative and may make representations on any matters affecting the building and engineering industries. It is to have access to all relevant information. Matters coming within the competence of the council include:

- (1) Mobilization of resources to secure maximum output and efficiency;
- (2) measures to secure maximum concentration of resources on vital work and to restrict nonessential work;
- (3) priority questions and the consideration of building programs and their relationship to available resources of labor and materials and the progress of all important jobs;
- (4) terms and conditions of employment affecting present output and efficiency;
- (5) welfare arrangements, general and particu-

<sup>1</sup> Data are from Local Government Chronicle, London, August 30, 1941; and report from James Somerville, United States assistant commercial attaché, London.



lar; (6) allocation of work among contractors and builders with regard to capacity, location, size, and type; (7) form of contract to suit war conditions and to secure the utmost incentive to efficiency and economy; (8) control and use of construction plant and of transport equipment; (9) production and distribution of materials, their design, standardization, and use as affecting efficiency; (10) education and training, and problems bearing on post-war reconstruction; (11) problems of manpower arising from competing demands for labor.

The formation of the Council has been stated to be "something entirely new in any great industry, with its all-embracing composition and its power to advise the Minister on almost any subject." A national plan is needed to supply skilled workers to the building industry, as nearly one-half of its workers have been lost since the war started. Building and civil engineering are complex and loosely knit industries, with large-scale organization lacking. In peacetime the workers attached to the industry number about 1,400,000. At present there are approximately 750,000 on the main war construction and building works. In spite of this reduction of personnel "there is a great and urgent building program in hand." House repairs and replacement of factory buildings lost through enemy action may become even more important, and there is a continuing need for expanding productive facilities.



### BRITISH PRICE-CONTROL ACT OF 1941

EXTENDED provision has been made in Great Britain against excessive rises in the charges made for both goods and services by the Goods and Services (Price Control) Act dated July 22, 1941, which amends and supplements the Prices of Goods Act, 1939.<sup>1</sup> A summary of the 1941 law is published in the August 1941 Ministry of Labor Gazette as follows:

"The act empowers the Board of Trade to issue orders fixing the maximum prices that may be charged at any stage of production or distribution for goods specified in the orders, and such orders may require traders to take specified steps to make known to their customers the maximum prices fixed for goods sold by them. Similarly, power is given to the Board to issue orders fixing the maximum charges that may be made for the performance of any specified service in relation to goods. The Board may also issue orders forbidding either generally in the United Kingdom or in a particular part thereof, the sale, except by businesses registered in accordance with the orders, of such second-hand goods as may be specified in the orders, if the Board are satisfied that excessive prices are being charged for the goods.

<sup>1</sup> Summarized in Monthly Labor Review for February 1940 (p. 327).

"The act provides in effect that the Board of Trade may by order prohibit (subject to licensed exceptions) the resale of goods by wholesalers except to retailers, unless the price of the goods would not thereby be increased, and may restrict the making of payments to persons for procuring the sale of goods controlled under the Limitation of Supplies Orders by persons registered under those orders. The purpose of the latter provision is to prevent increases in price due to commissions paid to intermediaries, who bring together wholesalers whose quotas under the Limitation of Supplies Orders are unexhausted and manufacturers or other wholesalers whose quotas are exhausted but who wish to dispose of further goods.

"An important amendment of the principal act is that whereby the Board of Trade are given power to make orders amending the first schedule to the principal act by omitting or altering any of the matters specified in it. Any order amending this schedule (which specifies the matters to be taken into consideration in fixing permitted increases in prices) is, however, to have effect only after a draft of it has been approved by resolution of both Houses of Parliament.

"Other amending and supplementary provisions are concerned with preventing evasions of the act. In particular, the transfer of property in price-regulated goods by barter is made unlawful, and provision is made for the appointment of inspectors to enforce the principal act and this act."



## EXTENSION OF ESSENTIAL-WORK ORDERS IN GREAT BRITAIN

APPLICATION of the Essential Work (General Provisions) Order of 1941<sup>1</sup> is gradually being extended to industries that are important in the defense of Great Britain and in which regularization of employment is required. Industrial coverage is not automatic. Individual orders are issued by industry, and establishments within an industry are scheduled before they became subject to essential-work orders. Of the orders made, those for the Merchant Navy, the coal, building and civil engineering industries were summarized in earlier issues of the Monthly Labor Review.<sup>2</sup> Employees affected have regular employment at guaranteed wages and must be available for work that is deemed to be suitable. The present article refers to recent regulations dealing with essential-work provisions.

### *Amendment of General Order<sup>3</sup>*

To improve discipline in factories engaged in important Government work the British Essential Work (General Provisions) Order of 1941 was recently amended.

<sup>1</sup> See Monthly Labor Review for May 1941 (p. 1085) for the terms of this order.

<sup>2</sup> See Monthly Labor Review for August 1941 (pp. 368 and 369) and September 1941 (p. 613).

<sup>3</sup> Report from James Somerville, assistant commercial attaché, American Embassy at London; and Great Britain, Ministry of Labor Gazette, London, August 1941.

*Suspensions.*—Under the amendment, when an employer suspends a worker, in accordance with his conditions of service, for not exceeding 3 days, the worker is not automatically entitled to the guaranteed wage. Formerly the order had the effect of giving a man a paid holiday during suspension. Now loss of pay will result from suspension unless the worker proves that the action is arbitrary or unjustifiable.

An employee who is suspended has the right of appeal to the local appeal board within 3 days from the beginning of the suspension. If the board is unanimous in holding his suspension unjustified, or (failing a unanimous opinion by the board) if the National Service Officer decides the suspension was unjustified, the worker is entitled to the guaranteed wage. If an adverse decision is made, the worker loses such wage for the 3 days, but not for the rest of the week. A time worker will be entitled to "a proportionate minimum wage for the days on which he works. As the piece worker's minimum wage is calculated by the day, the same assurance is not required in his case."

This amendment was adopted after the order was observed in operation, and consideration is to be given to similar amendment of other special orders, as far as may be necessary, in consultation with the industries concerned. The action described above was taken because disciplinary suspension lost its significance under the original order, since, regardless of the cause, a worker was entitled to wages in respect of the entire period of his suspension. In practice, therefore, when workers committed offenses which, though serious, were not sufficiently serious to justify dismissal, the employer had no choice but dismissal. This situation also tended to encourage the infliction of fines, which, the Ministry of Labor Gazette states, it is generally agreed is unsatisfactory as a disciplinary measure.

*Absence caused by sickness.*—Changes are also made in the provisions dealing with absence caused by sickness. Strictly construed, the effect of the original rule for calculating the guaranteed minimum wage under the essential work order was to deprive the time worker of the guaranteed wage for the week if he was absent for a part of the week owing to illness. By the terms of the amendment the time worker who is absent for a part of the week because of illness is entitled to a proportionate guaranteed payment for the remainder of the week (provided that he submits satisfactory evidence of sickness should he be required to do so). No such provision is necessary covering piece workers, as their guaranteed minimum wage is based on each day separately.

*Insubordination.*—The amendment also permits employers scheduled under this order to report "failure to comply with lawful and reasonable orders (including orders as to the working of day or night work and of a reasonable amount of overtime)." Power to report



indiscipline to the National Service Officer was included in the various essential-work orders for special industries that were made later than the general order.

*Scheduling of specified jobs.*—Another change is that power has now been granted to schedule an enterprise only in respect to specific classes or descriptions of persons, since the requirement that every worker in a scheduled establishment be covered has been found too rigid in certain cases. This change conforms with the provision on scheduling under the essential-work order for building and civil engineering.

### *Chemicals and Iron and Steel Industry* <sup>4</sup>

Owing to the need for increased production and the most economical use of manpower and plant in some parts of the chemical and iron and steel industries of Great Britain, the Minister of Labor and National Service applied the Essential Work (General Provisions) Order, 1941, as amended, in specified branches of these industries. A special labor-supply organization is to secure the best use of labor (including the employment of women, wherever possible) in each case; to facilitate the transfer of workers from one operation to another, or between one undertaking and another, or both; and to arrange for obtaining additional labor from outside the industry, as needed.

Control is to extend to such portion of the labor supply of the chemical industry as the Chemical Control recommends. For the iron and steel industry the coverage is for the portion which was under the Iron and Steel Control when the industry was brought under the essential-work order.

### *Dock Labor* <sup>4</sup>

On the basis of proposals made by the National Joint Council for Dock Labor, an essential-work order was recently adopted to insure a regular, sufficient, and mobile labor force in British ports.

A corporation is being created to promote, finance, and administer the system which is to be introduced when schemes for individual ports have been approved by the Minister of Labor and National Service. This corporation, which is to be responsible for the transfer of dockers between ports, is to include a chairman appointed by the Minister after consultation with the National Joint Council, a finance member appointed by the Minister, and three representatives each of employers and employees appointed by the National Joint Council. There will be a local board and a port labor manager in each port, appointed by the corporation. The local boards are to be responsible to the corporation for matters of local policy and general administra-

<sup>4</sup> Great Britain. Ministry of Labor Gazette, London, August 1941.



tion and are to cooperate with the regional port directors and port emergency committees in providing the labor necessary for the quick turn-around of ships. The port registration committees will continue to register port transport workers and employers and are to be given new functions under the port schemes; but they will no longer have the control over the arrangements for engaging labor that was granted under the earlier plan.<sup>5</sup> The local joint committees will continue to be responsible for industrial negotiations.

The new order applies to permanent men but does not affect their employment. Other dockers selected for inclusion in the scheme are insured regular employment. Payment is to be at the appropriate rate for the job, with piece rates to be introduced as widely as possible. When a docker who is subject to the order finishes his job, he automatically will become a corporation employee, and as such, as long as he fulfills the conditions, will be paid 5s. for each of the 11 half-days per week on which he reports as required but is not allocated to work. Special provision is to be made for aged workers and those capable of light work. Dockers subject to the scheme must be prepared to undertake any suitable work, including labor in clearing the port area and travel to other ports as needed.

Failure to comply with these conditions involves loss of any payments otherwise due from the corporation for the week in which the failure occurs, and may be followed by disciplinary action including, in extreme cases, exclusion from the scheme. Panels are to be appointed to hear appeals. Wages are payable weekly, and a week's vacation is to be provided annually for regular workers, with pay at the rate of 75s. or 80s., according to the size of the port.

Seven days' notice of dismissal will be required, except in cases of serious misconduct. Workers will have the right to appeal in cases of dismissal for serious misconduct. If a unanimous decision is made by the appeal panel, it will be final; otherwise the case may be referred to the National Service officer for decision.

Employers must register in order to be entitled to engage in port transport work. They may employ their own permanent employees or those allocated to them by the port labor manager. Labor requirements must be reported to the manager; records must be kept; wages earned by men must be allocated, and prescribed contributions must be paid to the manager. An employer who fails to comply with these requirements may be removed from the register, subject to an appeal to the Minister.

Costs are to be met principally from levies on member employers, but the charge may not exceed 25 percent of the gross wage bill. The British Government will pay certain administrative expenses.

<sup>5</sup> For a description of the earlier plan see *Monthly Labor Review* for May 1941 (pp. 1086, 1087).

The scheme was to be applied immediately to the ports of London, Bristol Channel, Firth of Forth, Humber, Tees, Tyne, and Wear. Further consideration was to be given to the order before extending it to the Merseyside and Clydeside ports, where the Minister of War Transport was the employer of all dock workers.



### ABSENTEEISM IN BRITISH PLANTS <sup>1</sup>

THE causes and methods of reducing industrial absenteeism are being widely discussed in Great Britain at the present time.

*Munitions industry.*—The Seventeenth Report of the Select Committee on National Expenditure deals with the problem as it exists in two munitions plants in which shells are filled. Reasons cited for the high percentage of absenteeism in these establishments include the workers' difficulties in obtaining transportation over the long distances from their homes; the absence of adequate housing accommodation near the factories; the conditions of work in the factories, particularly the unsatisfactory canteen facilities; and the 7-day week.

The committee recommended that avoidable causes be dealt with effectively and promptly in order that inexcusable absenteeism can be remedied by appropriate action.

To increase production, greater incentives were urged, with piece work introduced where appropriate. Improvement in conditions of work was also cited as a means of reducing industrial fatigue. To obtain better managers of ordnance factories, the Committee urged that the scale of wages established by the Treasury should be revised.

*Coal mining.*—In dealing with absenteeism among coal-mine workers the supplying of extra food rations has been suggested. Men doing heavy mine work have keenly felt the rationing of the staple foods—bacon, cheese, and beef. It is customary for mine workers to eat at least 1 meal underground. Their food is brought from home and includes rationed products. In contrast, factory employees usually obtain a meal a day at the canteen, without the use of ration cards. To overcome the disadvantage the suggestion made is that an extra ration be granted the miner.

Before the war the 5-day week was generally observed in mines, but the 6-day week, imposing an added strain, is required in war-time. The miner is therefore working 25 to 50 additional days a year on a reduced food supply. These factors, in the opinion of the London Times, should be taken into account in a sympathetic hearing of the mine workers' position, to be followed by appropriate action.

<sup>1</sup> Report from James Somerville, assistant commercial attaché, American Embassy at London.

## BRITISH EMPLOYER REQUIRED TO BARGAIN COLLECTIVELY<sup>1</sup>

IN CONNECTION with a dispute resulting from a plant manager's contention that he had the right to run a nonunion shop, a court of inquiry in Great Britain held that the employer might attempt to exercise this right in peacetime, but that in wartime such a procedure was not in the national interest. The report<sup>2</sup> of the court of inquiry which was appointed under the terms of the Industrial Courts Act of 1919, states that the court was constituted on June 21, 1941, to inquire into the causes and circumstances of a dispute between the management of a gun and cartridge manufacturing plant and the National Union of General and Municipal Workers.

### *The Union's Case*

Representatives of labor stated that the union took a particular interest in the woman workers in the establishment because of complaints about wages and conditions of employment. Efforts were made to organize the workers, beginning in January. Because of the firm's attitude toward previous attempts to organize, the organizer did not follow the procedure of approaching the management, but posted a notice outside the plant inviting the workers to attend a meeting to discuss trade-unionism and its effect on wages and working conditions. Some 60 workers enrolled in the union and 3 shop stewards were elected. Application was made for negotiations with the employer, but this was refused. This was followed, according to the workers' statement, by dismissal of one of the woman workers, a charge hand, who was one of the shop stewards. She was given 2 weeks' wages in lieu of notice. Efforts were made to have her reinstated; some of the employees refused to go to work on the night shift without her reinstatement, and were therefore asked to apply for their pay.

A claim was made to the Ministry of Labor and National Service for a wage adjustment. The claim was referred to the National Arbitration Tribunal, and a wage increase was awarded.

A number of workers returned to work and some found other employment, but 45 were still without work at the time of the report and had been instructed by an employee representative to register at the employment exchange as having been locked out.

### *The Firm's Case*

Although the firm's account differed somewhat, in general it did not dissent from the union's historical summary of the dispute. Or-

<sup>1</sup> Report from James Somerville, assistant commercial attaché, London.

<sup>2</sup> Great Britain. Ministry of Labor and National Service. Report by a Court of Inquiry into a dispute between Trent Guns & Cartridges, Ltd., Grimsby, and the National Union of General and Municipal Workers. London, 1941. (Cmd. 6300.)



dinarily the company manufactures cartridges used for sports, but since the war it has been engaged in making small metal parts for the Ministry of Supply, in competition with larger firms having more modern equipment and less hand labor.

The employer stated that he had no reason to suppose there was dissatisfaction with wages until the union started its activities. When this dissatisfaction became apparent the Ministry of Supply was approached with a view to obtaining an increase in the contract price in order to pay higher wages. The discharged worker was, according to the firm's statement, dismissed in the interests of production and because of complaints that her inattention resulted in tool breakage. It was stated that restaffing the plant did not involve undue delay, that little production was lost, and that after the change, production was on a higher scale.

The management contended that the workers had not attempted to negotiate their differences and were therefore on strike and not locked out.

### *Findings of Court*

According to the court's findings, the cause of the woman worker's dismissal was her union activity. Although the other women refused to return to their jobs without their dismissed companion, if some promise of inquiry or negotiations had been made they would have returned immediately. Without union recognition it "is difficult to see how the girls could show their sympathy with the dismissed girl without some form of demonstration." The fundamental cause of the dispute was held to be the stubborn refusal of the management to deal with the union. The court regretted this and stated it was bound to lead to a dispute which might end in a work stoppage—as had in fact occurred. Therefore, the almost uniform practice and well-tried method of recognizing and negotiating with the union was recommended for this company. Without collective bargaining other troubles would no doubt arise. The sincerity of the management in its refusal was recognized, but the court stated that in wartime it is a duty to the country "to fall into line with the vast majority of other good employers and assist the Government in the accepted methods of conciliation."



## ALLOWANCES FOR DEPENDENTS IN SWISS MILITARY SERVICE <sup>1</sup>

TWO orders issued by the Swiss Federal Council on December 28, 1940, regulating the allowances for loss of wages or earnings of men in military service, became effective January 1, 1941. In addition to changes

in preceding regulations on the subject, there are new provisions regarding the payment of allowances for loss of earnings of men engaged in independent agricultural, handicraft, or commercial work. Under the new regulations—

An allowance for loss of wages is due to soldiers whose principal occupation is in employment on account of another and who perform not less than 3 days' active service in the calendar month. Active service is considered to be any compulsory military service performed in the Swiss army as a result of mobilization, including auxiliary military service, service as a recruit after attainment of the age of 22 years, air-raid precautions service, and service in Red Cross medical units and in labor groups.

The allowance is granted for each day of active service which gives a right to pay, and includes an allowance for each child and a household allowance. The latter is fixed at 2.90 francs in rural sections, at 3.35 francs in semiurban sections, and at 3.75 francs in towns. If the wage is over 7 francs per day, including Sundays and holidays, the allowance is raised by 10 centimes for each additional 50 centimes in wages, but in no case may it be more than 4.70 francs in rural sections, 5.35 francs in semiurban sections, and 6 francs in towns. The children's allowances are as follows:

		First child	Each subsequent child
Rural sections	francs	1. 20	1. 00
Semiurban sections	do	1. 45	1. 20
Towns	do	1. 80	1. 50

Allowances for children 15 to 18 years of age, who are earning money, are reduced in proportion to their earnings. Soldiers not eligible for a household allowance are granted an allowance of 50 centimes per day during their active military service.

If a soldier regularly supports persons who are not able to maintain themselves and whom he is legally or morally bound to aid or maintain, he may, on request, be paid an additional allowance by the competent equalization fund, unless he is entitled to a household allowance or to children's allowances for such persons.

The total of the various allowances for loss of wages may not exceed 90 percent of the wage if this amounted to less than 6 francs a day in rural districts, 7 francs in semiurban districts, and 8 francs in towns (Sundays and holidays included). In all other cases the maximum limit is 80 percent. Other things being equal, the allowances for loss of wages may not be less for a high wage than for a low wage, and may in no case exceed 12 francs a day.

Similar provisions for loss of earnings apply to soldiers who perform at least 3 days' active compulsory service in the Army during the calendar month and are engaged in independent agricultural, handicraft, or commercial activity.

## Employment Conditions

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### EMPLOYMENT AND PAY ROLLS IN STATE AND LOCAL GOVERNMENTS, 1941

THE subject of the personnel of State and local governments has until comparatively recently been a neglected field of public employment statistics. In 1938 the Bureau of Labor Statistics, in cooperation with the Work Projects Administration, undertook the State, county, and municipal survey to obtain monthly employment and pay-roll data for the period 1929 to 1939, inclusive, from State governments and a large sample of city, county, and township governments and their associated special districts. Reports for individual governmental units included in this survey are being published currently, and estimates for the country as a whole are in the process of preparation.

To fill the need for current data on personnel of State and local governments, the Bureau of the Census, with the cooperation of the Bureau of Foreign and Domestic Commerce, the Bureau of Labor Statistics, and the International City Managers' Association, inaugurated the State and Local Government Quarterly Employment Survey in January 1940. As the cumulative result of five quarterly canvasses, in which inquiries were sent to 6,500 State, city, county, and township governments, the Quarterly Employment Survey has obtained information for 89 percent of the total State and local nonschool public pay rolls in the United States. On the basis of this information the Bureau of the Census has estimated total nonschool employment and pay rolls of State and local governments in January 1941.<sup>1</sup>

When complete results of the State, county, and municipal survey become available, they will provide a reliable basis for constructing linked indexes to extend the current series of employment and pay rolls of State and local governments back to 1929.

#### *Earnings and Employment Status of Employees*

Nonschool employees of State and local governments numbered 1,927,000 in January 1941. The corresponding monthly pay rolls were \$206,490,000, or an average of \$107 per employee. This average

<sup>1</sup> United States Department of Commerce Bureau of the Census. State and Local Government Quarterly Employment Survey, Vol. 2, No. 1—Final, August 1941. Public Employment in the United States: 1941—With Special Attention to State and Local Government.



is considerably less than the rate for full-time work because only about 75 percent of the employees included had permanent, full-time government positions. The range in the proportion of such employees from 19 percent in township governments to 82 percent in State governments was one of the chief reasons for the variations in average monthly earnings per employee in the several types of governmental units shown in table 1. In view of the large differences in the amount of part-time employment, pay rolls are probably a more reliable criterion of the economic importance of the employment provided at the different levels of government than the employment statistics.<sup>2</sup>

TABLE 1.—*Employment and Pay Rolls of State and Local Governments in the United States, January 1941*

[Schools, work relief, and contract work are excluded]

Type of governmental unit	Number of employees						Monthly pay roll		Average monthly earnings, all employees
	General governmental functions				Public-service enterprises		General governmental functions	Public service enterprises	
	Total	Permanent		Temporary and other	Total	Permanent, full time			
		Full time	Part time						
All types of units.....	1, 761, 135	1, 295, 910	348, 164	117, 061	166, 360	144, 544	\$184, 528, 000	\$21, 962, 000	\$107
States.....	509, 640	416, 895	39, 839	52, 906	12, 633	11, 467	57, 847, 000	1, 592, 000	114
Cities, towns, and villages <sup>1</sup> .....	773, 822	573, 508	155, 604	44, 710	148, 348	128, 469	87, 354, 000	19, 810, 000	116
Counties <sup>2</sup> .....	321, 414	258, 780	43, 263	19, 371	-----	-----	33, 202, 000	-----	103
Townships and special districts.....	156, 259	46, 727	109, 532	(3)	5, 379	4, 608	6, 125, 000	561, 000	41
Townships <sup>1</sup> .....	126, 912	24, 569	102, 343	(3)	-----	-----	3, 600, 000	-----	28
Special districts <sup>4</sup> .....	29, 347	22, 158	7, 189	(3)	5, 379	4, 608	2, 525, 000	561, 000	89

<sup>1</sup> New England towns and several townships in New Jersey and Pennsylvania and towns in New York which have been classified as urban by the Bureau of the Census have been included with cities.

<sup>2</sup> Employment and pay roll information for governments of 3 counties which have been consolidated with cities, 3 unorganized counties, 1 county classified as urban by the Bureau of the Census, and 26 independent cities is not included with data shown for counties.

<sup>3</sup> Temporary and other employees are included with permanent part-time employees, general governmental functions.

<sup>4</sup> Data for the Chicago, Ill., Park District; Portland, Maine, Water District; South Portland, Maine, Sewerage District; Port of New Orleans, La., Lake Charles Harbor and Terminal District, La., and the Port of Portland, Oreg.—have been included with information for other units of government. Data for 74 townships in the State of Washington have been included with information for special districts.

### Functions of Employees

State, city, and county nonschool employees have been analyzed in terms of the functions of government in which they were engaged in January 1941. The emphasis on particular governmental services varies from level to level of government. In all three types of govern-

<sup>1</sup> In the Quarterly Employment Survey, employees with permanent or indefinite status working the prescribed number of hours for a full-time week in their respective offices and departments, including elective or other officials paid by the government or by fees and having a term of one year or more are classified as having permanent full-time status. Employees with permanent or indefinite tenure working fewer hours per week than is prescribed for full-time employees in their respective departments are classified as permanent part-time employees. Included as part-time are officials also engaged in an outside profession or employment and volunteer firemen receiving pay. Seasonal, emergency, and other personnel without permanent tenure are designated as temporary.

mental units shown in table 2, however, public works required the largest percentage of employees, the proportions being 21 percent in city governments and approximately 30 percent in county and State governments. Public works includes such activities as the maintenance, lighting, and construction of streets, highways, bridges, etc., the maintenance and construction of sewers and disposal plants, the collection of garbage, and other sanitation work. The second most important function of State governments, in terms of personnel, was the operation of hospitals, which utilized 21 percent of the workers. The police protection furnished by cities accounted for 14 percent of all municipal employees, and fire protection for 13 percent. In county governments, general administrative and financial activities, with 28 percent of the total employees, ranked next to public works in personnel requirements. One new function added to the list of governmental responsibilities in recent years is the administration of unemployment-compensation and employment services by the States. Such activities accounted for 7 percent of all State employees in January 1941.

TABLE 2.—*Percentage Distribution of Employees of State, City, and County Governments in the United States, by Function, January 1941*

[Schools, work relief, and contract work are excluded]

Function	Percent of total employees <sup>1</sup>			
	Total State, city, and county	State	City	County
General administrative and financial.....	11.1	8.6	6.8	27.6
Legislative.....	2.2	.3	4.1	.....
Judicial.....	1.9	.8	1.2	5.6
Police.....	10.0	6.2	14.2	4.4
Fire.....	6.6	.....	12.7	.....
Public works (highways, sewers, bridges sanitation, etc.).....	25.3	30.1	21.1	29.5
Health.....	2.9	3.4	2.6	2.6
Hospitals.....	11.7	20.9	6.0	13.2
Charities.....	4.4	5.5	2.8	7.5
Development and conservation of natural resources.....	1.8	5.4	.....	1.2
Correction.....	1.9	5.0	.....	2.4
Libraries.....	1.2	.1	1.9	1.1
Recreation and parks.....	2.8	.5	5.1	.....
Unemployment compensation and unemployment services.....	2.1	7.0	.....	4.8
Other general functions.....	4.4	3.4	4.8	4.8
Water supply.....	4.2	.....	8.1	.....
Electric light and power.....	1.2	.....	2.2	.....
Other public service enterprises.....	4.2	2.7	6.5	.3
Total.....	100.0	100.0	100.0	100.

<sup>1</sup> Includes permanent full-time and part-time employees and temporary and other employees.

### Current Trends in Employment

On the basis of the quarterly canvasses, the Bureau of the Census has also prepared indexes showing seasonal fluctuations in nonschool employment and pay rolls of State and local governments since January 1940. These indexes are presented in table 3.

TABLE 3.—*Indexes of Employment and Pay Rolls of State and Local Governments in the United States, January 1940–January 1941*

[January 1940=100]

Type of governmental unit	Number of employees					Amount of pay roll				
	1940				1941	1940				1941
	January	April	July	October	January	January	April	July	October	January
All types of units..	100	101	106	104	99	100	102	109	106	104
States.....	100	103	109	108	101	100	102	105	102	102
Cities <sup>1</sup> .....	100	98	104	101	101	100	101	111	108	107
Counties.....	100	103	105	104	96	100	105	109	109	103

<sup>1</sup> Revised on the basis of additional information.*Total Public Employment*

Nonschool employees of State and local governments comprised 36 percent of all public employees and received 33 percent of the total public pay rolls in January 1941. To arrive at these ratios, the Bureau of the Census combined the results of its Quarterly Employment Survey with figures for public education collected by the United States Office of Education and figures for the Federal Government collected by the Civil Service Commission and the Bureau of Labor Statistics. The amounts shown in table 4 include persons in the military service of the Federal Government, but exclude persons on work relief and those employed on government projects for which contracts were awarded.

TABLE 4.—*Number and Percentage Distribution of All Public Employees, by Type of Governmental Unit, January 1941*

Type of governmental unit	Employees		Monthly pay roll	
	Number	Percent of total	Amount	Percent of total
Total public employment.....	5,360,000	100	\$621,000,000	100
Federal.....	2,118,000	40	240,000,000	39
Public education.....	1,315,000	24	175,000,000	28
State.....	522,000	10	59,000,000	10
City.....	922,000	17	107,000,000	17
County and others.....	483,000	9	40,000,000	6

<sup>1</sup> The sum of 5,360,000 public employees differs from the total of 4,845,000 employees for January 1941 reported by the Bureau of Foreign and Domestic Commerce in the Survey of Current Business, June 1941 (p. 25), because State and local part-time employees have been excluded from the latter estimate. The Bureau of Labor Statistics, whose estimates the Bureau of Foreign and Domestic Commerce has quoted, does not include part-time State and local government employees in its estimates of public employment, in order to avoid duplication in figures for total public and private employment of employees who work part of the time for governmental agencies and the rest of the time in private employment.



## ESTIMATED GROWTH IN THE LABOR FORCE, 1940 TO 1950

IN April 1940, there were 52.8 million persons employed or seeking employment in the United States, according to preliminary tabulations of data from the 1940 Census. By 1950, population growth and further increases in the employment of women outside the home may be expected to raise the figure by about 6 million.

This forecast takes no account of special factors which may affect the growth of the labor force during this period. The number of persons available for employment at any given time is always greater than the number who will report themselves as seeking work. Increased levels of employment, higher wage levels, and more attractive working conditions will lead many persons to accept employment who would not have reported themselves as "seeking work" under 1940 conditions. This may lead to a very considerable increase in the labor force. Thus, the *potential* labor force at any time is always greater than the *actual* labor force. The forecasts given below are based on projections of 1940 actual labor force data, and therefore relate to the actual labor force to be expected in 1950 if general economic conditions in that year are similar to those of 1940. If, on the other hand, the conditions should more closely resemble those of 1918, the labor force (including 3 or 4 million in the armed forces) might be as much as 15 million larger than in 1940.

Recent data from the Work Projects Administration's monthly unemployment survey indicate that the labor force is subject also to very large seasonal fluctuations. Thus in 1940, the labor force increased by more than 3 million from April to July, largely as a result of the entrance of school children during the summer months. In 1941, there was a similar increase of 2.7 millions. No attempt has been made to estimate the future effect of seasonal fluctuations. The forecasts relate to April 1945 and April 1950, and it is assumed that there will be no change in the pattern of seasonal fluctuations which will affect the relative size of the labor force in these months.

The forecasts take into account the growth and changing age composition of the population, and the trend toward increasing participation of women in the labor market. No allowance is made for any further decline in child labor, and for this reason the figures for the age group 14-19 are probably an overestimate. Allowance has been made for a substantial further decline in the proportion of persons over 65 who will be in the labor market, but the actual number of workers in this age group shows an increase because of the increasing number of older persons in the population. The estimates for this age group are entirely arbitrary.

The most significant shift reflected in these forecasts is the large increase in the number and proportion of women in the labor force.

Barring special conditions which may accelerate or retard this trend, the size of the increase may be predicted with considerable certainty. During the last half-century, an increasing proportion of the women reaching working age have sought gainful employment. Of those who entered the labor market by the time they reached the age of 20-24, however, the proportion withdrawing at later ages has not varied appreciably. Thus while the number of women in the younger age groups who will be available for employment in the future cannot be too readily predicted, the number in the remaining age groups can be estimated fairly accurately.

*Estimated Population and Labor Force 14 Years of Age and Over, by Sex and Age, for 1940, 1945, and 1950*

[In thousands]

Sex and age group	1940			1945			1950		
	Total number	Labor force		Total number	Labor force		Total number	Labor force	
		Num-ber	Per-cent		Num-ber	Per-cent		Num-ber	Per-cent
Both sexes.....	100,972	52,841	52.3	106,437	56,405	53.0	110,287	58,884	53.4
Males.....	50,614	39,994	79.0	53,116	42,133	79.3	54,927	43,557	79.3
14 to 19 years.....	7,411	2,571	34.7	7,071	2,481	35.1	6,506	2,247	34.5
20 to 24 years.....	5,665	4,997	88.2	6,201	5,471	88.2	5,914	5,217	88.2
25 to 44 years.....	19,809	18,750	94.7	20,804	19,695	94.7	22,134	20,952	94.7
45 to 64 years.....	13,342	11,846	88.8	14,257	12,621	88.5	14,905	13,173	88.4
65 years and over.....	4,387	1,830	41.7	4,783	1,865	39.0	5,468	1,968	36.0
Females.....	50,358	12,847	25.5	53,321	14,272	26.8	55,360	15,327	27.7
14 to 19 years.....	7,353	1,385	18.8	6,845	1,302	19.0	6,290	1,176	18.7
20 to 24 years.....	5,897	2,678	45.4	6,081	2,893	47.6	5,736	2,852	49.7
25 to 44 years.....	19,934	6,036	30.3	21,188	6,737	31.8	22,245	7,406	33.3
45 to 64 years.....	12,605	2,489	19.7	14,259	3,093	21.7	15,354	3,664	23.9
65 years and over.....	4,569	259	5.7	4,948	247	5.0	5,735	229	4.0

SOURCES: Population and labor force, 1940: Sixteenth Census of the United States, 1940, Release P-4, No. 3 (February 8, 1941). Population, 1945 and 1950: Sixteenth Census of the United States, 1940, Release P-3, No. 15 (July 23, 1941). Male labor force age 14-64, 1945 and 1950 estimated by applying 1940 percentages by 5-year age groups to corresponding age groups of the estimated population. Female labor force, age 14-19, 1945 and 1950 estimated by applying 1940 percentages. Female labor force, age 20-64, 1945 and 1950 estimated by applying increasing percentages based on experience of the preceding 40 years. Male and female labor force, age 65 and over, 1945 and 1950 estimated by applying somewhat lower percentages than those prevailing in 1940, in order to make rough allowance for continuation of past trends.



## OCCUPATIONAL DISTRIBUTION OF POPULATION IN COLOMBIA, JULY 1938 <sup>1</sup>

THE population census of the Republic of Colombia, taken in July 1938, showed that, of a total population of 8,701,816 persons, 4,475,483, or 51.4 percent were classed as gainful workers. Of the total population, 2,590,058 (29.8 percent) were under 14 years of age; 648,387 (7.5 percent), students; 632,823 (7.3 percent), homemakers

<sup>1</sup> Data are from *Panorama de la economía Colombiana*, by Luis Vidales (in *Anales de Economía y Estadística*, Bogotá, August 25, 1940) and *Actividades económicas de la población Colombiana* (Departamento del Atlántico), by Luis B. Ortiz C. (in *Anales de Economía y Estadística*, Bogotá, September 25, 1940).

(excluding servants); 200,683 (2.3 percent), unclassified economically inactive persons; and 137,505 (1.6 percent) included all other economically inactive persons, subdivided into unemployed, capitalists and retired persons, patients in hospitals, and prison inmates.

Over 99 percent of the population consisted of Colombians.

### Kind of Employment

The economically active population of Colombia is classified in table 1, by sex and by nature of employment or duties.

TABLE 1.—*Gainfully Active Population of Colombia According to Census of July 1938, by Sex and Kind of Employment*

Kind of employment	Total	Males	Females
All employments.....	4,475,483	2,414,366	2,061,117
Owners and managers.....	1,081,234	805,393	275,841
Salaried employees.....	187,223	149,899	37,324
Wage earners.....	1,150,375	1,015,762	134,613
Farmers and other rural workers.....	1,811,346	339,924	1,471,422
Professional persons, self-employed.....	9,143	8,933	210
Urban servants.....	138,800	24,136	114,664
Undefined.....	97,362	70,319	27,043

Of the economically active population, 2,835,092 or 63.4 percent were directly concerned with production, including industrial wage earners, farmers, and agricultural and other rural workers. The remainder—1,640,391 or 36.6 percent—consisted of persons directly or indirectly dependent on production (owners and managers, salaried employees, and servants). Owners and managers constituted 24.2 percent of the entire economically active population of Colombia.

Owners and managers and salaried employees numbered 1,268,457 persons in all Colombia, or 28.3 percent of the entire economically active population.

For each owner or manager there were 2.6 workers engaged directly in production, and for each worker there were 3 nonproductive persons—persons engaged in other activities of public life or inactive.

Of the salaried employees, 103,263 (55.16 percent) were in Government service and 83,960 were in private employment.

The 618,759 owners and managers in agriculture constituted 57.2 percent of all owners and managers shown in the census of 1938, and their 2,495,252 workers formed 88.4 percent of all workers in Colombia. There were 3.1 agricultural workers for each owner or manager. The 831,712 wage earners in this branch of industry constituted 72.3 percent of all wage earners in Colombia.

### Classification by Industry

Agriculture and grazing, and manufacturing were the largest industrial groups, accounting for 73.5 and 11.8 percent of the total gainfully employed population (table 2).



TABLE 2.—*Industrial Classification of Gainfully Active Population of Colombia, Census of July 1938, by Sex*

Industry group	Total	Males	Females
All industry groups.....	4, 475, 483	2, 414, 366	2, 061, 117
Manufacturing.....	527, 246	263, 843	263, 403
Services.....	222, 822	158, 636	64, 186
Commerce.....	153, 725	123, 519	30, 206
Extraction of precious metals.....	53, 960	31, 949	22, 011
Professions.....	19, 017	15, 262	3, 755
Agriculture and grazing.....	3, 289, 740	1, 733, 785	1, 555, 955
Forestry, hunting, and fishing.....	18, 638	17, 630	1, 008
Petroleum.....	18, 109	17, 241	868
Other activities.....	142, 105	27, 268	114, 837
Activities poorly defined.....	30, 121	25, 233	4, 888

### Selected Industry Groups

Table 3 shows the distribution, by sex, of persons classified in 11 industrial groups which include more than 20,000 persons each. These groups contained 489,513 persons, or 10.9 percent of the economically active population, thus indicating the relatively wide distribution and lack of concentration in industry.

TABLE 3.—*Distribution of Gainful Workers in 11 Industrial Groups in Colombia, Census of July 1938, by Sex*

Industry or occupation	Total	Males	Females
All groups.....	489, 513	225, 317	264, 196
Tailors, seamstresses, and milliners.....	105, 477	18, 364	87, 113
Industries using animal and vegetable fibers.....	90, 599	9, 150	81, 409
Building construction, demolition, and repair.....	54, 895	53, 565	1, 330
Wood processing, carpentry, and cabinet work.....	44, 356	42, 405	1, 951
Manufacture of hats (felt and straw).....	35, 311	2, 647	32, 664
Cleaning establishments and personal service.....	30, 960	8, 788	22, 172
Public administration.....	29, 518	27, 216	2, 302
Railway and highway construction and maintenance.....	28, 615	27, 962	653
Leather-goods industries.....	25, 130	22, 333	2, 797
Textile industry.....	24, 125	6, 209	17, 916
Education, public and private.....	20, 567	6, 678	13, 889

### Sex of Workers

In 6 of the 11 industrial groups covered in table 3 (tailors, etc., industries using animal and vegetable fibers, hat manufacture, cleaning and personal service, textiles, and education) women greatly outnumbered men. Among domestics and servants in agriculture (a total of 1,493,288 persons) the 1,436,062 women formed 96.2 percent.

Still more striking is the fact that, of the owners and managers in industries using animal and vegetable fibers, the textile industry, tailoring, etc., and hat manufacture, 170,198 of the total of 187,906 (or 90.6 percent) were women.

### Department of Atlántico

The Department of Atlántico, the smallest and most densely populated of the 14 Departments into which the greater part of Colombia

is divided, had a total population of 268,409 inhabitants in an area of 1,340 square miles, or an average density of population of almost exactly 200 persons per square mile including the capital, Barranquilla. This population density is somewhat more than that of the State of Maryland (184.2 persons per square mile).

The Department of Atlántico had the highest proportion of economically inactive persons in the Republic of Colombia—65.9 percent, as compared with 48.6 percent for the country as a whole. This high proportion was due in part to the fact that a smaller percentage of the active population (36.7 percent as compared with 73.9 percent for the entire Republic) was engaged in agriculture and grazing, and in forestry, hunting and fishing; these are occupations in which the members of the family assist the head of the family and were accordingly counted as economically active. Industry and services in general together occupied 51.2 percent of the active population.

Of the entire economically active population of Colombia, 53.9 percent were males and 46.1 percent females; on the other hand, in the Department of Atlántico, 72.1 percent of such population consisted of men, and 27.9 percent of women.

## *Women in Industry*

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### COMPARATIVE EARNINGS AND HOURS OF WOMEN AND MEN, OCTOBER 1940

MORE women were employed in manufacturing in October 1940 than in the fall of the preceding year, and their average hourly earnings were higher. The increase in employment was 4 percent and in average hourly earnings 5 percent, as compared with 10 and 4 percent, respectively, for men.

Some of the greatest increases in women's employment, as in the electrical machinery, hardware, and woolen and worsted-goods industries, were undoubtedly due to defense activities. In such industries as knit goods, cotton dresses, and men's cotton clothing, the substantial increases shown in women's hourly earnings reflected the effectiveness of Federal and State laws designed to increase wages in the lowest brackets.

These findings are based on an analysis by the United States Women's Bureau of pay-roll tabulations made by the Bureau of Labor Statistics from records furnished by employers for over 433,000 women in 22 large woman-employing manufacturing industries, and for nearly 32,000 women in laundries and dry cleaning. The 12 States covered by the reports<sup>1</sup> are those having the greatest number of women employed in manufacturing.

Increases in average week's earnings of women occurred in most of the industries reported, and were usually due to a combination of increases in hourly earnings and in hours at work. In most industries women's work hours averaged less than 39 a week.

Women's earnings were lower than men's in every industry reported, and in nearly half of these industries they averaged less than the lowest average for men (45.5 cents in cotton mills).

Table 1 shows average hours and earnings of men and women in the large woman-employing industries in the 12 States, in October 1940.

The trends in employment, earnings, and hours of men and women in the 24 woman-employing industries, during the year from September 1939 to October 1940 may be seen in table 2, which presents data for identical establishments.

<sup>1</sup> California, Connecticut, Illinois, Indiana, Massachusetts, Michigan, Missouri, New Jersey, New York, North Carolina, Ohio, and Pennsylvania.



TABLE 1.—Average Hours and Average Hourly and Weekly Earnings in Selected Industries in October 1940, by Sex

[From reports by employers; preliminary figures]

Industry	Women reported		Average week's earnings		Average hours worked <sup>1</sup>		Average hourly earnings <sup>1</sup>	
	Number	Percent of all reported employees						
			Men	Women	Men	Women	Men	Women
Manufacturing								
Textile industries.....	127,454	45	\$21.54	\$15.67	38.6	35.8	55.9	Cents 43.9
Cotton goods.....	45,538	37	17.35	14.53	38.2	36.4	45.5	40.4
Knit goods.....	44,804	61	26.61	16.30	37.9	34.9	70.8	46.7
Hosiery.....	31,153	57	27.13	16.92	37.4	34.9	72.8	48.6
Underwear.....	13,651	74	22.86	14.42	41.1	34.9	56.6	41.0
Silk and rayon.....	14,734	43	20.64	14.49	38.5	35.8	53.7	40.5
Woolen and worsted.....	22,378	42	24.86	17.87	40.0	36.6	62.2	48.9
Clothing industries.....	127,085	73	29.82	16.30	32.9	31.5	93.0	52.7
Men's clothing.....	69,767	69	26.10	14.64	33.3	31.4	81.8	47.7
Suits and overcoats.....	28,948	55	26.88	14.90	32.2	28.6	86.9	53.8
Cotton clothing.....	40,819	83	22.56	14.29	38.2	34.2	58.6	41.6
Women's clothing.....	57,318	79	35.16	17.95	32.4	31.5	109.1	57.7
Undergarments, etc.....	24,237	87	29.90	16.81	40.5	36.4	72.0	45.2
Coats and suits.....	4,237	42	38.17	23.86	28.8	29.4	127.6	81.8
Dresses, cotton.....	14,300	91	25.94	13.64	39.5	32.0	67.1	40.6
Dresses, other.....	14,544	76	35.61	19.63	31.6	27.5	112.0	70.9
Food industries: Confectionery.....	18,052	63	25.39	15.65	42.6	37.5	59.0	41.6
Leather industries: Boots and shoes.....	30,418	45	19.86	13.14	33.0	30.5	60.3	43.6
Tobacco industries: Cigars.....	14,827	85	21.57	15.51	40.7	37.4	53.0	41.5
Paper and printing:								
Book and job.....	14,100	27	35.84	17.19	38.9	37.0	92.4	46.8
Paper boxes (set-up).....	8,439	64	25.58	16.87	42.9	40.4	59.8	41.8
Electrical industries:								
Electrical machinery and supplies.....	40,826	23	34.70	20.99	42.4	39.6	82.0	53.2
Radios and phonographs.....	19,003	51	30.84	19.26	41.3	37.8	74.5	51.0
Metal industries: Hardware.....	11,742	30	30.62	21.36	40.9	38.4	75.3	55.8
Rubber goods:								
Auto tires and tubes.....	5,103	15	37.07	23.61	35.5	33.5	105.2	70.5
Boots and shoes.....	3,904	55	28.32	18.73	40.9	37.1	68.7	49.2
Glass and pottery.....	12,268	23	30.21	17.07	38.3	37.2	79.2	45.9
Nonmanufacturing								
Laundries.....	27,602	66	28.13	14.57	46.0	38.8	60.4	36.2
Dyeing and cleaning.....	4,391	45	27.54	16.61	44.3	39.9	62.9	42.0

<sup>1</sup> Computed from smaller number of employees than total, since man-hours were not reported for all.

TABLE 2.—Changes in Employment, Earnings, and Hours in Identical Establishments, September 1939 to October 1940, by Sex

[From reports by employers; preliminary figures]

Industry	Percent of change from September 1939 to October 1940 in—							
	Number employed		Average week's earnings		Average hours worked <sup>1</sup>		Average hourly earnings <sup>1</sup>	
	Men	Women	Men	Women	Men	Women	Men	Women
<b>Manufacturing</b>								
Textile industries.....	+4.8	+3.3	+4.7	+8.3	+0.3	+1.1	+4.5	+6.5
Cotton goods.....	+6.4	+3.3	+5.5	+4.7	-.5	-2.7	+6.2	+7.5
Knit goods.....	+2.4	-.4	-3.5	+6.8	-2.8	-2.2	-1.0	+8.5
Hosiery.....	+5.1	+3.3	-4.5	+6.1	-3.6	-3.0	-1.5	+8.9
Underwear.....	-5.8	-5.5	+5.5	+9.4	+2.5	+.9	+2.9	+6.7
Silk and rayon.....	-6.4	+6.3	+6.3	+11.6	+1.3	+4.9	+4.1	+5.4
Woolen and worsted.....	+12.0	+16.2	+10.3	+12.3	+3.3	+8.9	+8.5	+3.5
Clothing industries.....	-1.3	-1.9	+9.5	+9.4	+8.9	+3.3	-.1	+4.7
Men's clothing.....	-3.3	-3.4	+1.6	+2.4	+3.1	-1.3	+1.5	+4.6
Suits and overcoats.....	-5.0	-8.8	+1.1	-8.1	+3.2	-8.3	+1.8	+1.1
Cotton clothing.....	+2.4	-.8	+4.5	+16.1	+3.2	+5.2	-.3	+9.4
Women's clothing.....	+3.1	+.2	+19.2	+15.5	+18.4	+7.9	-1.8	+4.6
Undergarments, etc.....	+7.0	+2.4	+19.9	+30.5	+15.7	+19.0	+8.6	+11.4
Coats and suits.....	+2.3	-4.5	+25.2	+26.0	+31.7	+27.2	-8.2	+3.0
Dresses, cotton.....	+.8	-2.5	+7.8	+20.7	+2.5	-1.3	+3.9	+16.2
Dresses, other.....	+2.5	+1.5	+14.1	+3.7	+11.5	-.4	+3.5	-.7
Food industries: Confectionery.....	+11.2	+8.6	-4.5	-1.1	-2.3	-6.3	-1.7	+.5
Leather industries: Boots and shoes.....	-3.1	-10.4	+1.2	+.2	-.9	-6.9	+1.8	+8.2
Tobacco industries: Cigars.....	-1.6	+.7	+7.7	+9.0	+8.1	+5.6	+1.4	+3.6
Paper and printing:								
Book and job.....	+4.1	+7.7	+3.1	+1.4	+1.3	+2.5	+1.9	-.4
Paper boxes (set-up).....	+9.1	+9.7	+3.8	+8.9	+2.6	+4.4	+1.5	+3.3
Electrical industries:								
Electrical machinery and supplies.....	+27.0	+24.5	+12.2	+7.6	+8.7	+5.0	+2.7	+2.3
Radios and phonographs.....	+18.7	+7.8	+6.2	+2.1	+2.5	-.3	+3.2	+2.8
Metal industries: Hardware.....	+12.9	+14.1	-5.5	-9.6	-1.2	-3.8	-1.8	-3.8
Rubber goods:								
Auto tires and tubes.....	+2.0	+6.4	+.3	+1.0	-1.6	+1.2	+1.1	-.4
Boots and shoes.....	+.6	+2.9	+6.8	+1.8	-1.0	-1.1	+8.4	+2.7
Glass and pottery.....	+8.2	+17.9	+16.0	+10.3	-8.0	+10.9	+7.9	-.7
<b>Nonmanufacturing</b>								
Laundries.....	-.1	+2.4	+.8	+1.4	+1.1	0	-.7	+1.4
Dyeing and cleaning.....	-1.3	-6.9	+3.5	-1.3	+.9	-1.0	+3.2	-.7

<sup>1</sup> Computed from smaller number of employees than total, since man-hours not reported for all.

## *Industrial Relations*

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### UNION-MANAGEMENT COOPERATION IN FULL-FASHIONED HOSIERY INDUSTRY <sup>1</sup>

#### *Summary*

A COOPERATIVE program which would enable unionized full-fashioned hosiery mills in the North to compete with the unorganized mills in the South having newer and more efficient equipment was included in the 1938 agreement between the American Federation of Hosiery Workers (C. I. O.) and the Full-Fashioned Hosiery Manufacturers of America, Inc. The union offered substantial wage concessions to unionized employers in return for commitments for the purchase of new machinery or the rehabilitation of old machinery. Under this program, average earnings of union workers dropped about 10 per cent, but some of this was recovered by higher individual wages made possible when new machinery was introduced. Significantly, the program seems to have reversed the trend toward new machinery installation in the South. In 1940, for the first time in several years, Pennsylvania led all other sections of the country in the installation of new full-fashioned hosiery equipment.

#### *Competition Between Union and Nonunion Areas*

The movement of industry from one industrial area to another has long been a major problem to unions. Among other reasons this movement has been motivated by the desire of employers to secure lower labor costs by establishing new plants in low-wage, nonunion areas. In the past, the abrupt removal of a plant during a strike for union recognition or an organizing drive, or even the threat of such removal, has sometimes effectively prevented unionization of a plant. These acts are now held to be unfair labor practices prohibited by the National Labor Relations Act. Even more serious from the unions' point of view, however, is the gradual decline in production in unionized areas and rise of production in nonunion areas. Even though such a shift may take several years in transition, the ultimate effect is the displacement of union members from their jobs and the decline or elimination of union strength in the industry.

<sup>1</sup> Prepared by Fred Joiner, under the direction of Florence Peterson, chief, Industrial Relations Division.



Unions faced with the shifting of industrial production away from unionized areas have two alternatives—either to carry out a successful organizing drive in the nonunion section of the industry, or, failing this, take steps to place the unionized employers on a more equal competitive footing with the nonunion employers. The latter may involve the acceptance of wage cuts, increases in work assignments, and the general lowering of working standards to meet those in nonunion plants. Another approach is to encourage employers under agreement to modernize equipment and install more efficient work methods in an effort to meet nonunion competition without the sacrifice of union working conditions. An outstanding example of this type of union-management cooperation is the rehabilitation program of the American Federation of Hosiery Workers, developed in an effort to protect the northern full-fashioned hosiery establishments from southern low-wage competition.

### *Characteristics of the Industry*

Between 1914 and 1929, the principal problem of the hosiery industry was to meet the rapidly growing demand for full-fashioned hosiery. Production during these years quadrupled twice, and there was an almost chronic shortage of productive equipment and experienced operators. This rapid development accentuated the effects of the depression which began in 1929 when the hosiery industry, in common with many consumer-goods industries, suffered severe curtailment in production and employment.

The development of the full-fashioned industry has been marked by continuous improvement in productive equipment. Short-section, low-gauge machinery has been replaced by more efficient, faster, higher-gauge machines. New plants opening with new equipment at once have a cost advantage over longer-established firms. Regional cost differences have produced a geographic shift in the industry from northern centers to the South. Whereas the South in 1929 had but 7 percent of the production equipment, in the spring of 1941 it had an estimated 37 percent. Philadelphia, with 33 percent of the hosiery-producing machinery in 1929, had lost its traditional position as hosiery center of the United States by 1941; only 10 percent of the productive capacity was centered in that area. Southern manufacturers not only enjoyed lower labor costs than northern operators, but had the additional advantage of newer, more productive equipment.

### *Collective Bargaining in the Full-Fashioned Hosiery Industry*

Although union organization in the hosiery industry began in the full-fashioned branch, the extension of union membership lagged behind the rapid expansion of this branch of the industry during the twenties.

When the depression came in 1929, union agreements covered less than 50 percent of the total production. Because of the difference between union and nonunion wage rates, union manufacturers were hardest hit by the depression. Concessions were necessary if union firms were to stay in business. In 1929 the union signed its first "national" agreement with the Full-Fashioned Hosiery Manufacturers of America, Inc., representing 53 mills with about 28 percent of the total hosiery-manufacturing equipment. The greater number of these mills were located in Philadelphia; the others were scattered throughout the North. This agreement provided for the first cut in union rates since 1924. A uniform schedule of piece rates for all association mills was adopted for the first time in this agreement, and continuous impartial machinery was established to settle particular piece rates and other disputes. In 1931 the union rates were cut still further, bringing them to about 50 percent of the 1929 level of wages. In return, the union manufacturers agreed to accept complete unionization of their mills and the check-off system of collecting union dues.

The NRA period witnessed a revival of union organization. Large hosiery firms in the Middle West were brought under agreement. The majority of the mills in the important Berks County (Pa.) area were organized. Although a few of these employers joined the Full-Fashioned Hosiery Manufacturers and thereby participated in the "national" agreement, the majority signed individual agreements embodying terms nearly identical with the association agreement. Even a few southern mills were organized during this campaign. Wage increases in the association agreement restored a part of the depression wage cuts of 1931. By 1938 the union claimed that 65 percent of the full-fashioned industry was under union agreement. However, the maintenance of union wage standards in the organized areas accentuated the movement of the full-fashioned hosiery industry to small communities in Pennsylvania, Delaware, Maryland, southern New Jersey, and the South. Although several of the northern "run-away" mills were brought under union organization, these were largely submarginal mills operating with obsolete equipment. This increased the need for the rehabilitation program and hastened its establishment.

### *The Rehabilitation Program*

In December 1937, the Full-Fashioned Hosiery Manufacturers, under the terms of the agreement with the union, convened an impartial wage-rate tribunal to consider reductions in the association's uniform schedule of piece rates. It was the opinion of the majority of the tribunal that many rates had become obsolete during the years since they were introduced, and that such obsolete rates constituted an obstacle to installation of modern equipment in association mills.

Accordingly, in February 1938, piece rates on many operations were reduced, the average wage reduction for hosiery workers amounting to about 15 percent.

Despite these reductions, the association entered agreement-renewal negotiations with the union in the summer of 1938, requesting further wage cuts to prevent widespread mill closings. Both the union and the association realized that further wage cuts would be only a temporary palliative; that without a comprehensive program of modernization among northern mills, they would soon be overwhelmed by southern competition. The union, however, was reluctant to accept further wage decreases without assurance that at least part of the savings would go toward the purchase of new equipment and thus help to bridge the gap in plant efficiency between the northern and southern mills. Also, the union felt that if the purchase of new machinery were guaranteed, workers' hourly earnings could be protected even though the piece rates were lowered, since the new equipment was considerably more productive than the old type then in use. The result of these negotiations was the rehabilitation program embodied in the 1938 agreement, to be continued for a period of 3 years.

There were two main features of the rehabilitation program. The first involved a departure from the uniform piece-rate system which had been in effect since 1929. This enabled the union to negotiate percentage wage reductions with individual employers, the size of the reduction depending on the financial status of each company and its willingness to cooperate in the introduction of new machinery. Rate cuts, ranging from 11 to 20 percent were negotiated in these supplemental agreements; the average reduction was about 14 percent. The second feature was an agreement between the union and each individual employer in which the employer promised to install new machinery or make certain improvements on existing machinery in return for immediate wage reductions. In addition, the union began a program of checking plant efficiency, making suggestions for improved lighting, arrangement of machinery, and other changes of methods in the unionized plants.

### *Results of Rehabilitation Program*

By the spring of 1941, according to the union, 325 new full-fashioned hosiery machines had been installed in association mills during the rehabilitation program. All were of 26-section, 45-gauge type or better. In addition, a widespread program of machine rebuilding was carried out in association mills. A few employers who have made commitments to the union to install new equipment have still to carry out this program.

Statistics on the installation of new hosiery equipment in the United States show a reversal of the trend toward southern installations in 1940. For the first time in several years, Pennsylvania led all other



sectors, taking 40 percent of all new "Reading" machines in 1940, while 33 percent went to the South. In 1938, the South bought 73 percent of new equipment as against Pennsylvania's 13 percent; while in 1939 the South took 47 percent to Pennsylvania's 31 percent.

The rehabilitation program, however, has not prevented the liquidation of marginal mills. According to the union, 45 mills which signed the 1938 agreement have ceased operation; these were mostly small plants operating with obsolete equipment. A few of these have been reopened under new management.

Studies made by the office of the impartial chairman of the full-fashioned hosiery industry reveal a decline in both employment and earnings during the rehabilitation program. Excluding unemployment caused by plant closings, total employment in association mills still operating in 1941 showed a decline of approximately 12 percent. However, average full-time weekly earnings were increased from the low point reached in 1939, when the program was being initiated, showing the effect of increased earnings when faster, more modern machinery was installed. The accompanying table based on studies made by the impartial chairman, shows the trend in employment and earnings in 1938, 1939, and 1941, in the various hosiery operations.

*Employment and Earnings in 24 Identical Mills Under Rehabilitation Program of American Federation of Hosiery Workers*

Operation	Number of workers			Average full-time weekly earnings		
	1938	1939	1941	1938	1939	1941
Legging.....	3,040	2,931	2,608	\$42.76	\$38.28	\$40.56
Footing.....	980	945	837	49.16	43.32	44.08
Topping.....	2,111	2,108	1,930	25.52	22.44	22.96
Looping.....	826	816	754	24.80	21.88	23.56
Grey mending.....	289	292	316	23.24	21.92	22.68
Seaming.....	1,249	1,201	1,093	22.00	20.32	21.68
Grey examining.....	438	408	350	19.68	19.04	20.08
All operations.....	8,933	8,701	7,888	33.06	29.52	30.76

Although the table shows a drop in average earnings even after the completion of the rehabilitation program, as compared with 1938, the union contends that the earnings of many individual workers have been raised as a result of promotions made possible by the new machinery. The experience of workers in one of the larger hosiery mills is given as an example:

Type of machine:	Output (doz. pairs)	Hours required	Weekly earnings
42-gauge, 20-section.....	50	40	\$40
45-gauge, 24-section.....	60	40	42
45-gauge, 28-section.....	90	40	45

Thus, even though piece rates were lowered, some individual earnings were increased, and the overhead cost to the manufacturer was substantially reduced.

### *Present Status of Rehabilitation Program*

The formal aspects of the rehabilitation program have been completed. The 1941 convention of the American Federation of Hosiery Workers adopted this resolution: "Manufacturers shall be charged with the responsibility of keeping their mills modernized in the future at their own expense." A return to uniform piece rates for all association mills and a substantial increase in all rates marked the new association agreement which took effect in September 1941. Officials of the union emphasize, however, that the union will continue its efforts toward improving the work methods in substandard mills, and will give all possible aid to employers who wish to increase the efficiency of their factories through cooperation with the union.

Recent developments have indicated that union-management cooperation in the hosiery industry is still very much in the forefront of union activity. The present severe shortage of silk, caused by the international situation and the needs of the defense program, is being met by joint action between the union and employers in an attempt to work out with Government officials a program which will minimize the effects of the silk shortage and prevent widespread unemployment. The union has proposed a program which would make the United States completely independent of foreign materials for the manufacture of hosiery through the rapid development of synthetic materials in this country. At conferences called by the Office of Production Management, attended by union officials and employers, agreement has been reached on the allocation and utilization of the existing supply of raw materials. Through weekly reports from its locals, the union is helping to enforce the 40-hour weekly employment limitation in the industry recommended by the OPM in an effort to spread employment. Undoubtedly, previous union-management experience in meeting jointly the economic problems of the hosiery industry will prove valuable in the working out of plans to protect the interests of hosiery workers during the present emergency.

# Industrial Disputes

## RECENT STRIKES

PRELIMINARY estimates of the Bureau of Labor Statistics show 475 strikes beginning in September 1941 in which 270,000 workers were involved. There were 1,925,000 man-days of idleness during all strikes in progress in September. Except for April and May, this represented greater strike activity than in any preceding month of the year.

The number of new strikes was 3 percent greater than the estimate for August, 88 percent greater than in September a year ago, and about double the average for September during the 5-year predefense period 1935-39.

The number of workers involved, due largely to coal-mining strikes—captive mines in the Appalachian area, Alabama mines, and eastern Pennsylvania anthracite mines—was 42 percent greater than in August, more than four times the number in September 1940, and 82 percent greater than the average for September 1935-39.

Because most of the large strikes in September were of comparatively short duration, the amount of idleness during strikes in the month was only 5 percent greater than in August. It was nearly 2½ times as great as in September a year ago and 30 percent greater than the 1935-39 September average.

Comparative figures for September 1941 and other periods are shown in the following table:

*Strikes in August and September 1941 Compared With Averages of Preceding 5-Year Period*

Item	September 1941 <sup>1</sup>	August 1941 <sup>1</sup>	September 1940	Averages for 5-year period, 1935-39	
				September	August
Number of strikes beginning in month.....	475	460	253	235	291
Number of workers involved in new strikes.....	270,000	190,000	65,362	148,405	82,829
Number of man-days idle during all strikes in progress during month.....	1,925,000	1,825,000	780,570	1,484,498	1,261,133

<sup>1</sup> Preliminary estimates.



STRIKES IN JULY 1941<sup>1</sup>

STRIKE activity which increased substantially during the spring months continued at a comparatively high level through July 1941, as regards number of disputes. However, in terms of workers involved and man-days of idleness the extent was considerably less than in April and May and about the same as in June.

The Bureau has received information on 400 strikes which began in July 1941 in which nearly 138,000 workers were involved. There were 165 strikes which continued into July from preceding months and the man-days of idleness in July during the 565 strikes in progress amounted to 1,290,000. Except for May, the number of new strikes in July was greater than in any month since August 1937. Although the number of workers involved and the amount of idleness were considerably less than in April and May, they were still much greater than in the early months of 1941 or than any month in 1940.

The largest strikes beginning in the month were (1) the strike of electricians and other building-trades workers in New York City, involving about 28,000 workers, discussed briefly, below; (2) a 4-day strike of several thousand construction workers on a small-arms plant at St. Louis, Mo., July 26 to July 29; (3) a short strike about the middle of the month at the Great Lakes Steel Corporation plant at Ecorse, Mich., which involved about 5,000 workers; and (4) a strike of several thousand timbermen and truck drivers supplying mine timber for coal mines in the Fayette County (Pa.) area which began on July 21 and was settled on August 7.

*Strike of New York electricians and building trades.*—The widespread strike of New York electricians, which involved approximately 28,000 building-trades workers, began July 29 and ended August 9. The strike was an attempt by the International Brotherhood of Electrical Workers, Local No. 3 (A. F. of L.), to compel the Consolidated Edison Co. of New York to let its electrical construction and installation work to outside contractors who would employ Local No. 3 men, instead of having the work done by its own forces who were members of the Brotherhood of Consolidated Edison Employees.

The latter union, although Local No. 3 charged that it was company-dominated, was held by the National Labor Relations Board to be a bona fide labor union, won an election held by the Board in April 1940, and was subsequently certified as exclusive bargaining agent. The company promptly signed an agreement with this organization and gave to it all construction work, some of which had previously been done by Local No. 3.

Since Local No. 3 members were not employed by the company, the local union could take no direct action, but A. F. of L. building-

<sup>1</sup> The Bureau's statistics on strikes exclude disputes lasting less than 1 day or involving fewer than six workers.

trades men began a series of small strikes in May against subcontractors working on Consolidated construction jobs. These strikes were intended to compel the Consolidated Edison Co. to accede to the union demands that it be given the disputed work in the company's Sherman Creek and Waterside generating stations. The dispute culminated in the general strike of 8,000 New York electricians on July 29. During the course of this dispute, about 1,000 electricians returned to work on defense jobs. At the same time the number of other building-trades men who were idle because of the dispute increased, until by the end of the strike approximately 20,000 additional workers were idle, either from sympathy with the electricians or because of work stoppages necessitated by the absence of the electricians. The peak of strike activity came on the evening of August 5, when union electricians partially "black-out" New York's Times Square.

On August 7, the dispute was certified to the National Defense Mediation Board, and on August 9, the union voted to end the strike pending a decision. On September 2, the Board, supporting the findings of its special investigator, concluded that Local No. 3's claims to the jobs on the Sherman Creek and Waterside plants were not justified but that, since Consolidated was the "sole owner" in New York that failed to use Local No. 3 men on construction work, the Board should continue to attempt to mediate the controversy to prevent further strife.

TABLE 1.—Trend of Strikes, 1935 to July 1941

Year and month	Number of strikes—			Workers involved in strikes—			Man-days idle during month or year
	Beginning in month or year	In progress during month	Ending in month	Beginning in month or year	In progress during month	Ending in month	
1935.....	2,014			1,117,213			15,456,337
1936.....	2,172			788,648			13,901,956
1937.....	4,740			1,860,621			28,424,857
1938.....	2,772			688,376			9,148,273
1939.....	2,613			1,170,962			17,812,219
1940.....	2,608			576,988			6,700,872
<i>1940</i>							
January.....	128	222	124	26,937	41,284	32,743	246,674
February.....	172	270	153	29,509	38,050	17,252	289,992
March.....	178	295	187	22,433	43,231	29,593	386,981
April.....	228	336	214	39,481	53,119	29,226	441,866
May.....	239	361	239	53,231	77,124	59,263	665,688
June.....	214	336	190	38,542	56,403	36,559	484,007
July.....	244	390	227	63,126	82,970	54,100	585,651
August.....	231	394	253	61,356	90,226	47,199	706,308
September.....	253	394	242	65,362	108,389	72,523	780,570
October.....	267	419	253	71,997	107,863	68,730	915,014
November.....	207	373	243	62,399	101,532	82,571	739,807
December.....	147	277	168	42,615	61,576	43,605	458,314
<i>1941<sup>1</sup></i>							
January.....	231	340	216	91,512	109,483	53,834	660,275
February.....	252	376	229	69,752	125,401	64,905	1,130,355
March.....	334	481	304	116,241	176,737	123,603	1,552,979
April.....	378	535	374	510,482	563,616	468,328	7,096,228
May.....	440	621	428	325,057	420,345	339,613	2,180,315
June.....	324	517	352	139,848	220,580	142,835	1,458,765
July.....	400	565	369	137,653	215,398	129,694	1,290,039

<sup>1</sup> Succeeding reports may show slightly different figures for the various months because of corrections and additions made as later information is received.

The proportion of employed workers involved in strikes during July (0.78 percent) was about the same as in June, and the amount of idleness as a percentage of available working time was slightly less in July than in June (table 2). The largest percentage of employed workers idle during July was in the building and construction industry. This was due largely to the strike of electricians and building-trades workers in New York City mentioned previously, and also to the continuation into July of the large strike of construction workers and truck drivers in the small-home building industry in New York City which began in June. The greatest amount of idleness in July compared with amount of work available was in the stone, clay, and glass products industries, largely as a result of the continuation during the whole month of the strike at plants of the United States Gypsum Co. in 10 States. This strike began June 26 and was settled August 29.

TABLE 2.—*Workers Involved and Man-Days Idle, During Strikes in June and July 1941, Compared with Total Workers and Available Work*

Industry or group	Percent of employed workers <sup>1</sup> involved in strikes during—		Man-days idle during strikes as percent of total man-days of work available <sup>2</sup>	
	June	July	June	July
All industries.....	0.79	0.78	0.25	0.21
All manufacturing groups.....	1.46	1.05	.49	.40
Iron, steel, and their products, excluding machinery.....	1.28	1.40	.41	.45
Machinery, excluding transportation equipment.....	.51	.71	.19	.14
Transportation equipment.....	3.00	.94	.62	.29
Nonferrous metals and their products.....	4.12	1.21	.82	.35
Lumber and allied products.....	3.16	1.14	1.37	.43
Stone, clay, and glass products.....	3.11	2.53	1.19	1.61
Textiles and their products.....	.90	1.02	.44	.33
Fabrics.....	.76	.83	.30	.31
Wearing apparel.....	1.58	1.56	.81	.43
Leather and its manufactures.....	.27	1.14	.10	.32
Food and kindred products.....	1.64	1.45	.51	.94
Tobacco manufactures.....	0	2.39	0	.90
Paper and printing.....	.49	.53	.28	.18
Chemicals and allied products.....	1.19	.59	.43	.20
Rubber products.....	1.81	1.35	.35	.35
Building and construction.....	2.37	4.34	.28	.41
Mining:				
Anthracite.....	.64	1.22	.06	.24
Bituminous coal.....	.48	1.40	.23	.30
Metalliferous.....	0	0	0	0
Quarrying and nonmetallic.....	.46	.13	.12	.04

<sup>1</sup> "Employed workers" as used here includes all workers except those in occupations and professions where strikes rarely, if ever, occur. In general, the term "employed workers" includes all employees except the following groups: Government workers, agricultural wage earners on farms employing less than 6, managerial and supervisory employees, and certain groups which because of the nature of their work cannot or do not strike, such as teachers, clergymen, and domestic servants. Self-employed and unemployed persons are, of course, excluded.

<sup>2</sup> "Total man-days of work available" was estimated for purposes of this table by multiplying the total employed workers in each industry or group by the number of days worked by most employees in the respective groups.

As indicated in table 3 there were more new strikes (50) beginning in July and a larger number of workers (42,874) involved in strikes in building and construction than in any other industry group. There were 42 strikes in the textile industries, 35 in wholesale and retail



trade, 33 in iron and steel, and 26 in the food industries. The large number of workers in the building and construction strikes was due principally to the electrical workers' strike in New York City. There were 14,000 workers involved in strikes in the iron and steel industries, 13,000 in textiles, and 9,500 in the machinery-manufacturing industries. The food industries had more man-days of idleness (198,000) than any other group. This was partly the result of two strikes which began in June and were in effect during all or most of July—one a strike of bakery-truck drivers in about 25 bakeries in the Boston area which was settled on July 27, and the other a strike of about 2,000 workers in 3 Philadelphia sugar refineries which was settled on September 11. Other industry groups having large amounts of idleness during strikes were building and construction 159,000, textiles 134,000, and stone, clay, and glass products, 123,500.

TABLE 3.—*Strikes in July 1941, by Industry, with Comparative Man-Day Figures for the Preceding 2 Years*

Industry	July 1941		Number of man-days idle during the 12-month period ending with—	
	Strikes beginning in month		July 1941	July 1940
	Number	Workers involved		
<b>All industries</b> .....	<b>400</b>	<b>137,653</b>	<b>1,290,039</b>	<b>18,917,961</b>
<b>Iron, steel, and their products, excluding machinery</b> .....	<b>33</b>	<b>14,195</b>	<b>121,170</b>	<b>984,195</b>
Blast furnaces, steel works, and rolling mills.....	6	6,187	19,760	327,048
Bolts, nuts, washers, and rivets.....	1	578	1,633	17,204
Cast-iron pipe and fittings.....	1	445	6,230	52,950
Cutlery (not including silver and plated cutlery) and edge tools.....	1	136	272	3,436
Forgings, iron and steel.....	3	679	6,844	18,409
Hardware.....				7,163
Plumbers' supplies and fixtures.....	4	2,013	12,945	48,403
Steam and hot-water heating apparatus and steam fittings.....	1	150	7,620	58,397
Stoves.....	3	829	4,631	43,956
Structural and ornamental metal work.....	4	721	10,400	30,157
Tin cans and other tinware.....	1	222	190	42,725
Tools (not including edge tools, machine tools, files, and saws).....				11,698
Wire and wire products.....	4	573	19,591	130,615
Other.....	4	1,662	31,054	192,034
<b>Machinery, excluding transportation equipment</b> .....	<b>25</b>	<b>9,527</b>	<b>56,221</b>	<b>2,284,613</b>
Agricultural implements.....	1	190	1,488	485,214
Cash registers, adding machines, and typewriters.....				88,601
Electrical machinery, apparatus, and supplies.....	2	245	5,964	667,586
Engines, turbines, tractors, and water wheels.....	2	650	9,423	29,291
Foundry and machine-shop products.....	14	7,850	33,454	719,570
Machine tools (power driven).....				91,353
Radio and phonographs.....			3,480	54,362
Textile machinery and parts.....				1,320
Other.....	6	592	2,412	147,196
<b>Transportation equipment</b> .....	<b>17</b>	<b>7,640</b>	<b>63,613</b>	<b>1,616,166</b>
Aircraft.....	1	196	2,781	104,565
Automobiles, bodies and parts.....	9	2,713	13,333	1,027,732
Cars, electric- and steam-railroad (including repair shops).....	4	2,005	19,057	119,428
Shipbuilding.....	3	2,726	28,442	357,531
Other.....				6,910

TABLE 3.—*Strikes in July 1941, by Industry, with Comparative Man-Day Figures for the Preceding 2 Years—Continued*

Industry	July 1941			Number of man-days idle during the 12-month period ending with—	
	Strikes beginning in month		Number of man-days idle during month	July 1941	July 1940
	Number	Workers involved			
<b>Nonferrous metals and their products</b> .....	13	2,341	27,430	387,500	213,204
Aluminum manufactures.....	1	14	42	97,263	375
Brass, bronze, and copper products.....	4	937	4,563	58,426	18,537
Clocks, watches, and other time-recording devices.....	1	200	2,600	312	230
Jewelry.....	2	186	7,770	12,320	1,798
Lighting equipment.....	1	177	1,239	43,213	5,418
Silverware and plated ware.....	1	20	460	50,814	1,925
Smelting and refining—copper, lead, and zinc.....	3	807	6,063	9,842	123,876
Stamped and enameled ware.....			4,693	48,292	39,393
Other.....				67,018	21,652
<b>Lumber and allied products</b> .....	22	7,311	68,198	1,271,421	727,172
Furniture.....	6	635	7,115	275,489	208,176
Millwork and planing.....	3	640	10,381	90,362	92,519
Sawmills and logging camps.....	6	5,079	41,442	793,335	302,863
Other.....	7	957	9,260	112,235	123,614
<b>Stone, clay, and glass products</b> .....	6	3,005	123,592	526,995	162,333
Brick, tile, and terra cotta.....	2	347	2,096	171,107	54,927
Cement.....	1	2,200	23,276	31,415	1,148
Glass.....				86,129	49,372
Marble, granite, slate, and other products.....	1	225	17,293	134	1,752
Pottery.....	2	233	80,927	89,812	7,091
Other.....				148,398	48,043
<b>Textiles and their products</b> .....	42	13,092	134,159	1,244,136	861,646
Fabrics.....	24	7,097	79,544	687,332	393,826
Carpets and rugs.....	1	190	380	4,206	891
Cotton goods.....	1	546	2,636	307,371	233,354
Cotton small wares.....				767	810
Dyeing and finishing textiles.....	3	973	3,947	40,280	17,947
Silk and rayon goods.....	4	2,107	6,927	93,415	48,811
Woolen and worsted goods.....	8	1,967	34,175	127,480	40,098
Other.....	7	1,314	31,479	113,813	51,915
Wearing apparel.....	18	5,995	54,615	556,804	467,820
Clothing, men's.....				20,981	23,989
Clothing, women's.....	6	2,746	21,716	155,535	239,222
Corsets and allied garments.....				9,825	3,820
Men's furnishings.....	1	107	1,201	29,343	16,019
Hats, caps, and millinery.....	1	69	1,866	10,221	58,488
Shirts and collars.....	4	1,362	10,471	47,114	11,233
Hosiery.....	4	1,578	5,180	103,201	68,145
Knit goods.....	1	54	13,154	156,689	44,006
Other.....	1	79	1,027	23,895	2,898
<b>Leather and its manufactures</b> .....	14	3,428	22,784	157,013	174,141
Boots and shoes.....	8	2,394	17,431	82,172	61,491
Leather.....	3	775	1,958	40,563	7,653
Other leather goods.....	3	259	3,395	14,278	104,997
<b>Food and kindred products</b> .....	26	5,675	198,310	662,798	286,933
Baking.....	7	547	109,212	158,673	24,096
Beverages.....	4	700	5,008	18,364	4,638
Butter.....	1	70	350	1,280	
Canning and preserving.....	1	148	1,163	141,538	79,105
Confectionery.....				37,141	15,346
Flour and grain mills.....	3	2,235	9,489	18,323	5,798
Ice cream.....				871	203
Slaughtering and meat packing.....	6	1,169	20,419	114,012	82,873
Sugar refining, cane.....			47,674	103,150	66,402
Other.....	4	806	4,995	69,446	8,472
<b>Tobacco manufactures</b> .....	1	2,165	17,855	44,449	103,790
Chewing and smoking tobacco and snuff.....					18
Cigars.....	1	2,165	17,855	44,449	103,772
<b>Paper and printing</b> .....	12	1,834	26,383	171,291	116,074
Boxes, paper.....	4	489	3,963	40,327	32,766
Paper and pulp.....	2	440	3,195	20,982	25,847
Printing and publishing:					
Book and job.....	1	537	11,722	29,642	5,840
Newspapers and periodicals.....	1	11	122	7,609	12,707
Other.....	4	357	7,381	72,731	38,914

TABLE 3.—*Strikes in July 1941, by Industry, with Comparative Man-Day Figures for the Preceding 2 Years—Continued*

Industry	July 1941			Number of man-days idle during the 12-month period ending with—	
	Strikes beginning in month		Number of man-days idle during month	July 1941	July 1940
	Number	Workers involved			
<b>Chemicals and allied products</b> .....	9	1,029	19,881	348,559	289,806
Chemicals.....	2	181	10,886	141,218	18,968
Cottonseed—oil, cake, and meal.....				1,661	13,255
Druggists' preparations.....	1	6	12	863	1,010
Explosives.....			990	6,919	801
Fertilizers.....	1	225	1,125	1,967	240
Paints and varnishes.....	1	141	1,974	16,751	3,119
Petroleum refining.....			298	1,538	25,107
Rayon and allied products.....				85,000	207,476
Soap.....	1	18	18	690	193
Other.....	3	458	4,578	91,952	19,639
<b>Rubber products</b> .....	5	1,874	11,634	135,118	102,195
Rubber boots and shoes.....	1	1,165	6,990	13,319	690
Rubber tires and inner tubes.....	1	490	1,595	41,672	67,298
Other rubber goods.....	3	219	3,049	80,127	34,237
<b>Miscellaneous manufacturing</b> .....	16	1,582	21,025	287,475	158,041
Electric light, power, and manufactured gas.....	1	248	3,968	11,239	11,358
Broom and brush.....			35	10,423	
Furriers and fur factories.....				12,987	31,441
Other.....	15	1,334	17,022	252,826	115,242
<b>Extraction of minerals</b> .....	14	6,113	26,650	5,760,388	274,499
Coal mining, anthracite.....	2	860	2,390	170,756	69,256
Coal mining, bituminous.....	9	5,168	23,733	5,563,034	157,821
Metalliferous mining.....				21,027	36,241
Quarrying and nonmetallic mining.....	2	64	416	2,706	6,261
Other.....	1	21	111	2,865	4,920
<b>Transportation and communication</b> .....	22	1,661	13,042	409,330	770,568
Water transportation.....	6	343	880	107,553	372,785
Motortruck transportation.....	10	530	8,508	197,006	123,772
Motorbus transportation.....	3	103	758	58,221	12,561
Taxis and miscellaneous.....	3	685	2,896	32,128	232,523
Electric railroad.....				11,051	
Steam railroad.....				340	568
Telephone and telegraph.....				1,116	26,744
Radio broadcasting and transmitting.....				148	1,585
Other.....				1,767	30
<b>Trade</b> .....	35	4,185	82,059	1,010,807	295,308
Wholesale.....	9	736	11,643	137,283	69,073
Retail.....	26	3,449	70,416	873,524	226,235
<b>Domestic and personal service</b> .....	24	5,785	58,228	180,509	202,175
Hotels, restaurants, and boarding houses.....	11	1,715	31,394	109,628	62,067
Personal service, barbers, beauty parlors.....	1	155	775	2,496	4,405
Laundries.....	7	2,926	20,319	51,655	78,097
Dyeing, cleaning, and pressing.....	3	919	3,332	7,304	51,681
Elevator and maintenance workers (when not attached to specific industry).....	2	70	408	8,490	4,851
Other.....				936	1,074
<b>Professional service</b> .....			8,539	40,543	23,139
Recreation and amusement.....			8,539	30,293	18,509
Professional.....				640	1,562
Semiprofessional, attendants, and helpers.....				9,610	3,068
<b>Building and construction</b> .....	50	42,874	159,262	872,003	405,991
Buildings, exclusive of PWA.....	42	42,326	155,918	821,193	309,321
All other construction (bridges, docks, etc., and PWA buildings).....	8	548	3,344	50,810	96,670
<b>Agriculture and fishing</b> .....	4	877	26,477	433,828	456,299
Agriculture.....	2	157	24,257	409,762	184,708
Fishing.....	2	720	2,220	24,066	271,590
<b>WPA and relief projects</b> .....			44	2,813	16,496
<b>Other manufacturing industries</b> .....	10	1,460	5,483	106,011	28,044



New strikes in Pennsylvania were more numerous during July than in any other State, although the number of workers involved and man-days of idleness were less than in New York (table 4). There were 53 strikes in Pennsylvania, 45 in New York, 40 in California, and 38 in Ohio. The large number of workers involved in New York (34,122) was due principally to the electricians' strike in New York City. In Pennsylvania there were 16,700 workers involved in new strikes, in Missouri 13,000, and in Ohio 12,800. Among the largest strikes in Pennsylvania were the strike of several thousand timbermen in Fayette County and the strike of nearly 2,000 clerks in retail food stores in several western Pennsylvania counties. In Missouri the largest strike occurred on the construction of a small-arms plant in St. Louis, which involved about 7,000 workers. The largest strikes in Ohio were at the Timken Roller Bearing Co. plant in Columbus and at the Heller Bros. Co. tool plant in Newcomerstown, involving 2,000 and 1,100 workers respectively.

TABLE 4.—*Strikes in July 1941, by States, with Comparative Man-Day Figures for the Preceding 2 Years*

State	Strikes beginning in July 1941		Number of man-days idle during July	Number of man-days idle during the 12-month period ending with—	
	Number	Workers involved		July 1941	July 1940
All States.....	1 400	137, 653	1, 290, 039	18, 917, 961	8, 651, 718
Alabama.....	6	692	4, 393	537, 772	59, 790
Arizona.....	1	21	357	17, 398	5, 876
Arkansas.....	1	19	195	15, 050	85, 457
California.....	40	7, 919	134, 448	1, 741, 934	775, 425
Colorado.....				55, 218	19, 132
Connecticut.....	7	1, 269	17, 017	205, 501	49, 544
Delaware.....				58, 457	5, 192
District of Columbia.....	3	296	5, 342	23, 332	21, 231
Florida.....	6	2, 365	7, 861	55, 093	104, 031
Georgia.....	2	259	2, 709	53, 003	54, 454
Idaho.....	1	11	386	8, 950	115
Illinois.....	22	9, 173	63, 075	1, 340, 967	469, 031
Indiana.....	18	3, 028	31, 141	574, 348	250, 967
Iowa.....	8	1, 078	14, 493	226, 498	25, 969
Kansas.....	1	139	3, 106	12, 880	4, 128
Kentucky.....	3	858	12, 670	649, 647	23, 078
Louisiana.....	3	352	4, 654	54, 334	22, 326
Maine.....			2, 254	42, 088	2, 472
Maryland.....	6	1, 535	3, 458	248, 121	231, 877
Massachusetts.....	13	2, 443	105, 393	292, 431	339, 551
Michigan.....	22	11, 529	86, 486	1, 506, 584	2, 140, 793
Minnesota.....	5	343	7, 079	126, 820	49, 403
Mississippi.....				10, 744	20, 648
Missouri.....	15	13, 065	68, 787	294, 791	198, 437
Montana.....			2, 178	6, 560	8, 691
Nebraska.....	1	28	488	4, 114	1, 047
Nevada.....	1	40	160	322	1, 052
New Hampshire.....	4	701	2, 622	11, 179	9, 585
New Jersey.....	26	5, 971	42, 322	657, 601	356, 138
New Mexico.....	1	10	910	24, 434	8, 615
New York.....	45	34, 122	211, 281	1, 851, 212	1, 049, 494
North Carolina.....	4	224	3, 019	109, 290	94, 538
North Dakota.....				2, 088	13, 537
Ohio.....	38	12, 846	133, 061	950, 307	290, 697
Oklahoma.....	3	38	1, 358	9, 322	28, 927

<sup>1</sup> The sum of this column is more than 400. This is due to the fact that 9 strikes which extended across State lines have been counted in this table as separate strikes in each State affected with the proper allocation of number of workers involved and man-days idle.

TABLE 4.—*Strikes in July 1941, by States, with Comparative Man-Day Figures for the Preceding 2 Years—Continued*

State	Strikes beginning in July 1941		Number of man-days idle during July	[Number of man-days idle during the 12-month period ending with—	
	Number	Workers involved		July 1941	July 1940
Oregon.....	7	783	25,159	199,595	129,895
Pennsylvania.....	53	16,737	189,769	3,207,420	718,969
Rhode Island.....	4	916	12,205	82,867	17,318
South Carolina.....				68,049	101,338
South Dakota.....			260	388	241
Tennessee.....	7	1,847	26,644	310,697	102,817
Texas.....	11	2,863	29,891	103,625	98,909
Utah.....	1	445	6,798	34,865	16,175
Vermont.....	1	183	1,464	4,455	8,270
Virginia.....	1	17	128	224,908	131,550
Washington.....	4	1,212	5,613	756,477	327,214
West Virginia.....	9	1,516	7,447	1,585,657	50,537
Wisconsin.....	5	604	11,562	555,968	126,767
Wyoming.....	1	66	396	4,600	150

The average number of workers involved in the 400 strikes beginning in July was 344, while the average for the strikes beginning in the first 7 months of the year was 589. This larger average was primarily due to the widespread coal strike in April. About 53 percent of the strikes beginning in the 7-month period involved fewer than 100 workers each, 40 percent involved between 100 and 1,000 workers each, and 7 percent involved over 1,000 workers. In the latter group there were 16 strikes which involved 10,000 or more workers (table 5).

In about 46 percent of the strikes beginning in July, including about one-third of the total workers involved, the major issues were union-organization matters (table 6). In a number of these strikes wage-and-hour demands were secondary issues. The strikes in which wages and hours were the principal issues, constituted 38 percent of the total and included over one-fourth of the total workers. About 16 percent of the strikes were over issues other than wages, hours, or union organization; namely, sympathy, jurisdiction, and union rivalry, and miscellaneous grievances such as increased work load, objection to Saturday and Sunday work, protests against hiring out-of-town workers, and demands for improvement of physical working conditions.

In the first 7 months of the year the major issues in about 50 percent of the strikes, including 33 percent of the workers involved, were union-organization matters. The strikes primarily over wage-and-hour issues comprised 36 percent of the total but included about 56 percent of the total workers involved. This proportion of total workers is relatively large because it includes the workers involved in the large coal-mining strikes in April and May.

TABLE 5.—*Strikes Beginning in the First 7 Months of 1941, by Industry Group and Number of Workers Involved*

Industry group	Total	Number of strikes in which the number of workers involved was—							
		6 and under 20	20 and under 100	100 and under 250	250 and under 500	500 and under 1,000	1,000 and under 5,000	5,000 and under 10,000	10,000 and over
All industries:									
Number.....	2,359	396	848	496	267	186	141	9	16
Percent.....	100.0	16.8	35.9	21.1	11.3	7.8	6.0	.4	.7
<i>Manufacturing</i>									
Iron, steel, and their products, excluding machinery.....	189	9	40	46	39	32	17	3	3
Machinery, excluding transportation equipment.....	181	13	67	39	27	18	15	1	1
Transportation equipment.....	84	3	12	17	7	19	21	2	3
Nonferrous metals and their products.....	73	13	21	16	10	4	8	1	
Lumber and allied products.....	169	16	68	53	20	8	3		1
Stone, clay, and glass products.....	78	6	28	19	10	7	8		
Textiles and their products.....	277	35	100	52	42	28	20		
Leather and its manufactures.....	49	4	18	8	9	10			
Food and kindred products.....	149	22	65	28	14	13	6	1	
Tobacco manufactures.....	2					1	1		
Paper and printing.....	81	20	27	24	7	2	1		
Chemicals and allied products.....	45	6	20	8	7	1	3		
Rubber products.....	31	3	7	6	7	6	2		
Miscellaneous manufacturing.....	83	17	33	20	9	4			
<i>Nonmanufacturing</i>									
Extraction of minerals.....	66	5	13	9	14	14	7		4
Transportation and communication.....	132	21	60	34	6	6	5		
Trade.....	210	79	88	26	11	2	4		
Domestic and personal service.....	119	41	48	22	3	2	3		
Professional service.....	17	6	7	2	1	1			
Building and construction.....	236	54	92	49	21	6	9	1	4
Agriculture and fishing.....	15	1	6	3	1	2	2		
WPA and relief projects.....	2	1	1						
Other nonmanufacturing industries.....	71	21	27	15	2		6		

TABLE 6.—*Strikes Beginning in July 1941, by Major Issues Involved, with Cumulative Figures for the Period, January to July 1941*

Major issue	Strikes beginning in July 1941				Strikes beginning in the period, January to July 1941			
	Number	Per-cent of total	Workers involved	Per-cent of total	Number	Per-cent of total	Workers involved	Per-cent of total
All issues.....	400	100.0	137,653	100.0	2,359	100.0	1,390,545	100.0
Wages and hours.....	152	38.0	37,881	27.5	848	35.9	773,705	55.6
Wage increase.....	135	33.7	33,451	24.2	744	31.4	750,328	53.9
Wage decrease.....					30	1.3	5,534	.4
Wage increase, hour decrease.....	15	3.8	4,361	3.2	68	2.9	17,604	1.3
Wage decrease, hour increase.....	2	.5	69	.1	6	.3	239	(1)
Union organization.....	182	45.5	45,620	33.1	1,174	49.8	452,907	32.6
Recognition.....	33	8.2	3,274	2.4	219	9.3	163,710	11.8
Recognition and wages.....	67	16.7	16,085	11.7	481	20.4	156,079	11.2
Recognition and hours.....	1	.3	21	(1)	1	(1)	21	(1)
Recognition, wages, and hours.....	25	6.3	1,583	1.2	129	5.5	12,543	.9
Discrimination.....	16	4.0	7,607	5.5	91	3.9	22,717	1.6
Strengthening bargaining position.....	4	1.0	1,251	.9	48	2.0	37,107	2.7
Closed or union shop.....	33	8.2	9,129	6.6	183	7.8	47,979	3.5
Other.....	3	.8	6,670	4.8	22	.9	12,751	.9
Miscellaneous.....	66	16.5	54,152	39.4	337	14.3	163,933	11.8
Sympathy.....	4	1.0	150	.1	20	.8	21,793	1.6
Rival unions or factions.....	21	5.3	33,422	24.3	101	4.3	57,727	4.2
Jurisdiction.....	6	1.5	647	.5	45	1.9	5,174	.4
Other.....	34	8.4	19,905	14.5	159	6.8	77,976	5.5
Not reported.....	1	.3	28	(1)	12	.5	1,263	.1

<sup>1</sup> Less than a tenth of 1 percent.

<sup>2</sup> It is probable that the figures here given do not include all jurisdictional strikes. Due to the local nature of these disputes, it is difficult for the Bureau to find out about all of them.



Strikes in which unions affiliated with the American Federation of Labor were involved constituted 54 percent of all strikes beginning in the first 7 months of the year but included only about 26 percent of the total workers involved. Unions affiliated with the Congress of Industrial Organizations were involved in 37 percent of the total strikes but these strikes included nearly 70 percent of the total workers involved. In 3 percent of the strikes no union organization was involved; 4 percent were rival-union disputes (table 7).

TABLE 7.—*Strikes Beginning in the First 7 Months of 1941, by Affiliations of Labor Organizations Involved*

Labor organization involved	Strikes		Workers involved	
	Number	Percent of total	Number	Percent of total
Total.....	2,359	100.0	1,390,545	100.0
American Federation of Labor.....	1,265	53.6	356,604	25.6
Congress of Industrial Organizations.....	868	36.8	949,132	68.2
Unaffiliated unions.....	37	1.6	13,010	1.0
Railroad brotherhoods.....	2	.1	82	(1)
Two rival unions.....	95	4.0	54,233	3.9
Company unions.....	12	.5	2,209	.2
No organization.....	77	3.3	14,194	1.0
Organization involved, but type not reported.....	1	(1)	7	(1)
Not reported.....	2	.1	174	(1)

<sup>1</sup> Less than a tenth of 1 percent.

The 2,272 strikes which ended in the 7-month period, January to July, had an average duration of 18 calendar days. Forty-one percent of the strikes were terminated in less than a week, about 43 percent lasted from a week to a month, and 16 percent were in effect for a month or longer. Sixty-four strikes in the latter group had been in progress for 3 months or more. Most of these were small strikes, however, only 5 of them involving over 500 workers. Two of the larger strikes in this group were terminated during July—the strike against Montgomery Ward & Co., in Oakland, Calif., Portland, Oreg., and several small western cities, which had been in effect since late 1940, and the strike of lemon pickers in Ventura County, Calif., which began in January 1941 (table 8).

Government officials or boards assisted in the settlement of more than half of the strikes ending in the first 7 months of the year. These strikes included more than three-fourths of the total workers involved. Included in this group were 35 strikes, with 401,406 workers involved, in which settlements were reached with the assistance of the National Defense Mediation Board. Union representatives negotiating directly with employers settled one-third of the strikes, in which 18 percent of

the total workers were involved. In 12 percent of the strikes no formal settlements were reached (table 9). In most of these cases the striking employees returned to work without settlement of the disputed issues or they lost their jobs when employers replaced them with new workers, moved to other localities, or went out of business.

TABLE 8.—*Strikes Ending in the 7-Month Period, January to July 1941, by Industry Group and Duration*

Industry group	Total	Number of strikes with duration of—					
		Less than 1 week	1 week and less than 1 1/2 month	1 1/2 and less than 1 month	1 and less than 2 months	2 and less than 3 months	3 months or more
All industries:							
Number.....	2, 272	932	566	404	243	63	64
Percent.....	100.0	41.0	24.9	17.8	10.7	2.8	2.8
<b>Manufacturing</b>							
Iron, steel, and their products, excluding machinery.....	171	86	43	19	19	2	2
Machinery, excluding transportation equipment.....	177	61	45	33	28	8	2
Transportation equipment.....	80	38	29	10	3		
Nonferrous metals and their products.....	69	25	20	14	6	1	3
Lumber and allied products.....	171	44	45	44	23	5	10
Stone, clay, and glass products.....	71	19	20	15	9	5	3
Textiles and their products.....	262	103	61	56	27	5	10
Leather and its manufactures.....	40	15	14	8	3		
Food and kindred products.....	147	54	34	31	17	5	6
Tobacco manufactures.....	2		2				
Paper and printing.....	79	28	15	13	18	4	1
Chemicals and allied products.....	40	13	12	5	9		1
Rubber products.....	32	12	9	4	5	1	1
Miscellaneous manufacturing.....	84	23	21	17	16	5	2
<b>Nonmanufacturing</b>							
Extraction of minerals.....	62	34	11	8	4	3	2
Transportation and communication.....	128	68	26	24	6	3	1
Trade.....	203	81	50	36	22	9	5
Domestic and personal service.....	117	57	23	20	7	2	8
Professional service.....	19	11	2	3		1	2
Building and construction.....	230	114	62	35	15	1	3
Agriculture and fishing.....	14	6	4	2	1		1
WPA and relief projects.....	3	1		1			1
Other nonmanufacturing industries.....	71	39	18	6	5	3	

TABLE 9.—*Methods of Negotiating Settlements of Strikes Ending in the 7-Month Period, January to July 1941*

Settlement negotiations carried on by—	Strikes		Workers involved	
	Number	Percent of total	Number	Percent of total
Total.....	2, 272	100.0	1, 322, 812	100.0
Employers and workers directly.....	49	2.2	5, 795	.4
Employers and representatives of organized workers directly.....	749	33.0	243, 884	18.4
Government officials or boards.....	1, 179	51.8	1, 019, 082	77.1
Private conciliators or arbitrators.....	23	1.0	2, 552	.2
Terminated without formal settlement.....	272	12.0	51, 499	3.9

In 42 percent of the total strikes ending in the period, January to July, the workers substantially won their demands. These strikes included half of the total workers involved. About 36 percent of the strikes, including 42 percent of the workers, were terminated with compromise settlements and 15 percent, which included less than 5 percent of the total workers, resulted in little or no gains for the striking employees (table 10).

TABLE 10.—*Results of Strikes Ending in the 7-Month Period, January to July 1941*

Result	Strikes		Workers involved	
	Number	Percent of total	Number	Percent of total
Total.....	2,272	100.0	1,322,812	100.0
Substantial gains to workers.....	964	42.4	660,223	50.0
Partial gains or compromises.....	808	35.6	549,117	41.5
Little or no gains to workers.....	330	14.5	60,102	4.5
Jurisdiction, rival union, or faction settlements.....	134	5.9	32,031	2.4
Indeterminate.....	23	1.0	19,872	1.5
Not reported.....	13	.6	1,467	.1

The results of the strikes which ended in the first 7 months of the year are shown in relation to the major issues involved in table 11. The workers substantially won 46 percent of the wage-and-hour strikes, obtained compromise settlements in 44 percent, and gained little or nothing in 10 percent. In the union-organization strikes, although they substantially won 47 percent, they obtained compromise settlements in about 34 percent, a smaller proportion than in the wage-and-hour group, and gained little or nothing as a result of 19 percent.

Of the workers involved in the disputes over wages and hours, about 56 percent substantially won their demands, 42 percent obtained compromise settlements, and less than 3 percent made little or no gains. In the union-organization strikes, 47 percent of the workers were successful, 45 percent obtained compromise settlements, and about 7 percent gained little or nothing.



TABLE 11.—Results of Strikes Ending in the 7-Month Period, January to July 1941, in Relation to Major Issues Involved

Major issue	Total	Strikes resulting in—					
		Substantial gains to workers	Partial gains or compromises	Little or no gains to workers	Jurisdiction, rival union, or faction settlements	Indeterminate	Not reported
Strikes							
All issues.....	2,272	964	808	330	134	23	13
Wages and hours.....	812	372	356	82	-----	1	1
Union organization.....	1,142	533	384	215	-----	8	2
Miscellaneous.....	318	59	68	33	134	14	10
Percentage distribution							
All issues.....	100.0	42.4	35.6	14.5	5.9	1.0	0.6
Wages and hours.....	100.0	45.9	43.8	10.1	-----	.1	.1
Union organization.....	100.0	46.7	33.6	18.8	-----	.7	.2
Miscellaneous.....	100.0	18.6	21.4	10.4	42.1	4.4	3.1
Workers involved							
All issues.....	1,322,812	660,223	549,117	60,102	32,031	19,872	1,467
Wages and hours.....	757,110	420,842	314,595	21,262	-----	200	211
Union organization.....	436,376	203,657	197,522	28,809	-----	6,364	34
Miscellaneous.....	129,326	35,724	37,000	10,031	32,031	13,318	1,222
Percentage distribution							
All issues.....	100.0	50.0	41.5	4.5	2.4	1.5	0.1
Wages and hours.....	100.0	55.6	41.6	2.8	-----	(1)	(1)
Union organization.....	100.0	46.6	45.3	6.6	-----	1.5	(1)
Miscellaneous.....	100.0	27.6	28.6	7.8	24.8	10.3	.9

<sup>1</sup> Less than a tenth of 1 percent.

## ACTIVITIES OF THE UNITED STATES CONCILIATION SERVICE, SEPTEMBER 1941

THE United States Conciliation Service, during September, disposed of 545 situations, involving 348,976 workers. The services of this agency were requested by the employers, employees, and other interested parties (table 1). Of these situations 158 were strikes and lock-outs involving 80,662 workers; 219 were threatened strikes and controversies involving 185,647 workers. Ten disputes were certified during the month to the National Defense Mediation Board, and jurisdiction was assumed by other agencies in 19 others. The remaining 139 situations included investigations, arbitrations, requests for information, consultations, etc.

The facilities of the Service were used in 29 major industrial fields, such as building trades, and the manufacture of foods, iron and steel, textiles, etc. (table 2), and were utilized by employees and employers in 45 States and the District of Columbia (table 3).

TABLE 1.—*Situations Disposed of by United States Conciliation Service, September 1941, by Type of Situation*

Type of situations	Number	Workers involved
All situations handled.....	545	348,976
Disputes.....	377	266,309
Strikes.....	156	80,350
Threatened strikes.....	153	59,743
Lock-outs.....	2	312
Controversies.....	66	125,902
Other situations.....	139	47,428
Investigations.....	63	17,596
Technical investigations and service.....	10	1,044
Arbitration.....	21	4,091
Requests to conduct consent elections.....	3	231
Requests for information.....	7	8
Consultations.....	9	1,423
Special services of commissioners.....	18	23,025
Complaints.....	8	40
Disputes referred to other agencies during negotiations.....	29	35,238
To nongovernment agencies.....	1	25
To National Defense Mediation Board.....	10	29,621
To National Labor Relations Board.....	18	5,360

TABLE 2.—*Situations Disposed of by United States Conciliation Service, September 1941, by Industries*

Industry	Disputes		Other situations		Total	
	Number	Workers involved	Number	Workers involved	Number	Workers involved
All industries.....	406	301,548	139	47,428	545	348,976
Agriculture.....	1	130			1	130
Automobile.....	13	27,038	2	183	15	27,221
Building trades.....	20	5,823	14	4,751	34	10,574
Chemicals.....	13	1,597	4	11,429	17	13,026
Communications.....			1	100	1	100
Domestic and personal.....	16	2,779	8	630	24	3,409
Electrical equipment.....	13	4,840	4	886	17	5,726
Food.....	48	36,899	4	275	52	37,174
Furniture.....	14	4,228	5	494	19	4,722
Iron and steel.....	56	43,525	20	8,477	76	52,002
Leather.....	7	2,904	2	33	9	2,937
Lumber.....	7	782	2	496	9	1,278
Machinery.....	29	13,103	5	1,641	34	14,744
Maritime.....	8	15,497	1	2,500	9	17,997
Mining.....	4	1,400	2	241	6	1,641
Motion pictures.....			1	1,150	1	1,150
Nonferrous metals.....	19	6,873	2	166	21	7,039
Paper.....	8	993			8	993
Petroleum.....	9	4,873	4	615	13	5,488
Printing.....	3	265	1	15	4	280
Professional.....	1	76	1	35	2	71
Rubber.....	4	1,443			4	1,443
Stone, clay, and glass.....	17	4,618	6	527	23	5,145
Textile.....	30	35,959	9	2,278	39	38,237
Tobacco.....	4	1,130	3	500	7	1,630
Trade.....	13	5,725	2	55	15	5,780
Transportation.....	14	1,995	11	884	25	2,879
Transportation equipment.....	14	69,704	3	158	17	69,862
Utilities.....	9	3,554	1	700	10	4,254
Unclassified.....	12	3,835	21	8,209	33	12,044

TABLE 3.—Situations Disposed of by United States Conciliation Service, September 1941,  
by States

State	Disputes		Other situations		Total	
	Num- ber	Workers involved	Num- ber	Workers involved	Num- ber	Workers involved
All States.....	406	301,548	139	47,428	545	348,976
Alabama.....	15	1,558	4	3,406	19	4,964
Arkansas.....	3	592	1	420	4	1,012
Arizona.....	5	49	1	1	6	50
California.....	33	87,965	14	7,631	47	95,596
Colorado.....	4	792	1	350	5	1,142
Connecticut.....	3	2,979	—	—	3	2,979
Delaware.....	1	52	—	—	1	52
District of Columbia.....	8	1,284	4	78	12	1,357
Florida.....	9	2,076	2	100	11	2,176
Georgia.....	9	2,416	4	25	13	2,441
Idaho.....	1	50	—	—	1	50
Illinois.....	18	30,471	6	1,438	24	31,909
Indiana.....	21	9,711	5	1,201	26	10,912
Iowa.....	10	1,428	4	244	14	1,672
Kansas.....	5	2,204	1	18	6	2,222
Kentucky.....	5	1,818	2	45	7	1,863
Louisiana.....	10	1,450	5	3,139	15	4,589
Maine.....	—	—	1	25	1	25
Maryland.....	6	13,671	3	2,251	9	15,922
Massachusetts.....	7	12,323	1	50	8	12,373
Michigan.....	32	26,143	12	3,105	44	29,248
Missouri.....	11	3,681	12	1,946	23	5,627
Minnesota.....	1	104	2	801	3	905
Mississippi.....	—	—	2	2,800	2	2,800
Montana.....	2	300	—	—	2	300
Nebraska.....	2	305	—	—	2	305
Nevada.....	—	—	1	150	1	150
New Mexico.....	2	92	—	—	2	92
New Jersey.....	19	5,900	4	455	23	6,355
New York.....	25	5,391	8	1,993	33	7,384
North Carolina.....	8	3,705	3	323	11	4,028
Ohio.....	27	8,527	6	11,497	33	20,024
Oklahoma.....	1	26	—	—	1	26
Oregon.....	1	270	—	—	1	270
Pennsylvania.....	41	27,747	16	3,311	57	31,058
Rhode Island.....	1	150	2	85	3	235
South Carolina.....	6	4,725	2	250	8	4,975
Texas.....	10	1,879	3	19	13	1,898
Tennessee.....	10	7,497	5	212	15	7,709
Utah.....	1	400	—	—	1	400
Virginia.....	6	435	1	63	7	498
Vermont.....	2	89	1	1	3	90
Washington.....	6	2,646	—	—	6	2,646
West Virginia.....	7	25,175	—	—	7	25,175
Wisconsin.....	11	2,972	—	—	11	2,972
Wyoming.....	1	500	—	—	1	500



## Social Insurance

### UNEMPLOYMENT-COMPENSATION OPERATIONS, AUGUST 1941 <sup>1</sup>

UNEMPLOYMENT BENEFITS, as well as placement activities, reflect the tremendous expansion in employment arising out of the Nation's defense program. Despite increased lay-offs resulting from material and equipment shortages, fewer claims for benefits were filed and fewer checks issued in August than in any month since all States began the payment of unemployment-compensation benefits. This indicated that many of the lay-offs were of comparatively short duration, so that claimants returned to work before attaining compensable status, and also that the volume of hiring was more than offsetting current lay-offs. Some 677,000 workers received benefit checks during the month, compared with a minimum of 1,300,000 in August 1940.

In August, workers were compensated for more than 2,400,000 weeks of unemployment. Thus far in 1941 the number of weeks compensated and the amount of benefits paid, as compared with the same month of 1940, have declined progressively, as follows:

	Percent of decrease, 1940-41, in—	
	Weeks compensated	Benefits
January.....	-7.1	-4.2
February.....	-24.6	-21.9
March.....	-31.2	-28.7
April.....	-38.8	-36.2
May.....	-45.7	-42.5
June.....	-46.0	-43.0
July.....	-50.1	-47.4
August.....	-51.6	-48.8

Altogether \$26,500,000 was paid out in benefits during August 1941, or 10 percent less than in July and approximately half the volume of August 1940. Despite the general decrease in payments, 17 States paid more benefits than in July. These included the major industrial States of Michigan, Indiana, Connecticut, New Jersey, and Ohio. Seasonal lay-offs in the automobile industry were mainly responsible for the increases in the first two States, largely concentrated in the cities of South Bend, Indianapolis, and Anderson in Indiana, and in Flint,

<sup>1</sup> Prepared by Research and Statistics Division, Bureau of Employment Security, Social Security Board.

Detroit, Lansing, and Pontiac in Michigan. In Connecticut and Michigan, the increases were also due in part to the initiation of new benefit years in July by many claimants.

Benefit payments thus far in 1941 have totaled \$252,400,000—35 percent below the January-August 1940 total. Only the District of Columbia and Louisiana paid more benefits than in the same period of 1940; modification of the benefit provision of the District of Columbia unemployment-compensation law and lay-offs following completion of defense construction projects in Louisiana were largely responsible for the increased payments.

With a reduction of more than 6 percent from July, the average weekly total of 572,000 benefit recipients in August represented the lowest figure for any month since October 1939. In the last week of August, only 564,000 claimants were receiving unemployment-compensation benefits, 442,000 fewer than in the same period last year.

There was a general decrease of 16 percent in continued-claim receipts, with almost all sections of the country sharing in the reduction. Continued claims averaged 728,600 weekly—9 percent below July and the lowest monthly average on record. Claim receipts, however, more than doubled in Michigan, and increased between 38 and 44 percent in Arkansas, Indiana, and Utah. Gains were also reported in Florida, Kansas, Louisiana, Missouri, and Tennessee. The number of persons filing claims dropped from 762,900 at the beginning of the month to 673,600 in the last week of the month, the lowest on record.

## Continued Unemployment Compensation Claims Received, Weeks Compensated, and Benefits Paid, by State, August 1941

[Data reported by State agencies, corrected to Sept. 20, 1941]

Social Security Board region and State	Continued claims <sup>1</sup>			Weeks compensated			
	Number	Type		Number	Type of unemployment		
		Waiting period	Compensable		Total	Partial and part-total combined <sup>2</sup>	Partial only <sup>3</sup>
Total.....	3, 044, 984	601, 149	2, 443, 835	2, 437, 953	2, 243, 564	194, 389	
Region I:							
Connecticut.....	22, 698	3, 666	19, 032	17, 314	16, 196	1, 118	1, 035
Maine.....	11, 656	1, 370	10, 286	10, 080	8, 178	1, 902	1, 347
Massachusetts.....	156, 435	23, 400	133, 035	139, 874	132, 791	7, 083	6, 406
New Hampshire.....	8, 021	2, 163	5, 858	5, 869	4, 881	988	929
Rhode Island.....	27, 359	2, 636	24, 723	24, 723	22, 276	2, 447	( <sup>4</sup> )
Vermont.....	1, 871	384	1, 487	1, 490	1, 347	143	84
Region II:							
New York.....	506, 476	100, 593	405, 883	427, 726	427, 726	( <sup>5</sup> )	( <sup>6</sup> )
Region III:							
Delaware.....	3, 143	270	2, 873	2, 840	2, 424	416	366
New Jersey.....	144, 906	29, 782	115, 124	114, 419	103, 537	10, 882	( <sup>7</sup> )
Pennsylvania.....	176, 065	53, 600	122, 465	123, 636	123, 636	( <sup>8</sup> )	( <sup>9</sup> )
Region IV:							
District of Columbia.....	14, 353	2, 058	12, 295	11, 896	11, 371	525	91
Maryland.....	47, 864	3, 686	44, 178	42, 600	36, 962	5, 638	5, 357
North Carolina.....	58, 894	7, 750	51, 144	53, 789	50, 682	3, 107	2, 567
Virginia.....	32, 394	3, 564	28, 830	28, 920	27, 719	1, 201	368
West Virginia.....	22, 769	2, 733	20, 036	21, 788	18, 356	3, 432	3, 275
Region V:							
Kentucky.....	16, 058	1, 758	14, 300	28, 600	25, 698	2, 902	1, 206
Michigan.....	314, 120	109, 369	204, 751	188, 950	184, 375	4, 575	4, 018
Ohio.....	111, 569	38, 323	73, 246	77, 042	68, 149	8, 893	( <sup>10</sup> )
Region VI:							
Illinois.....	189, 056	17, 653	171, 403	183, 021	139, 933	43, 088	28, 195
Indiana.....	63, 507	16, 819	46, 688	46, 646	40, 922	5, 724	( <sup>11</sup> )
Wisconsin.....	32, 455	8, 753	23, 702	24, 490	22, 233	2, 257	1, 443
Region VII:							
Alabama.....	47, 117	10, 613	36, 504	36, 506	34, 258	2, 248	218
Florida.....	94, 118	14, 096	80, 022	78, 466	71, 385	7, 081	( <sup>12</sup> )
Georgia.....	48, 861	14, 206	34, 655	35, 454	34, 058	1, 396	723
Mississippi.....	19, 786	3, 254	16, 532	15, 522	14, 613	909	497
South Carolina.....	26, 606	3, 864	22, 742	20, 848	18, 361	2, 487	729
Tennessee.....	68, 242	6, 164	62, 078	48, 845	47, 229	1, 616	348
Region VIII:							
Iowa.....	20, 995	5, 677	15, 318	14, 692	12, 293	2, 399	786
Minnesota.....	30, 779	4, 297	26, 482	27, 261	24, 110	3, 151	2, 235
Nebraska.....	6, 947	1, 336	5, 611	5, 250	4, 786	464	171
North Dakota.....	1, 966	276	1, 690	1, 801	1, 513	288	200
South Dakota.....	2, 286	335	1, 951	1, 932	1, 670	262	( <sup>13</sup> )
Region IX:							
Arkansas.....	40, 215	3, 271	36, 944	36, 944	35, 449	1, 495	411
Kansas.....	17, 189	2, 909	14, 280	14, 107	12, 886	1, 221	598
Missouri.....	66, 485	14, 501	51, 984	52, 526	47, 087	5, 439	4, 748
Oklahoma.....	18, 717	2, 429	16, 288	15, 259	13, 612	1, 647	111
Region X:							
Louisiana.....	108, 660	21, 116	87, 544	78, 671	75, 152	3, 519	( <sup>14</sup> )
New Mexico.....	5, 955	501	5, 454	5, 424	5, 130	294	103
Texas.....	96, 605	10, 953	85, 652	59, 296	52, 139	7, 157	439
Region XI:							
Arizona.....	7, 190	830	6, 360	6, 499	6, 180	319	23
Colorado.....	14, 474	1, 965	12, 509	12, 839	11, 005	1, 834	1, 305
Idaho.....	5, 117	701	4, 416	4, 305	4, 044	261	8
Montana.....	10, 184	1, 260	8, 924	8, 365	8, 365	( <sup>15</sup> )	( <sup>16</sup> )
Utah.....	12, 597	1, 371	11, 226	10, 040	9, 331	709	145
Wyoming.....	2, 733	578	2, 155	2, 173	1, 414	759	604
Region XII:							
California.....	269, 079	36, 530	232, 549	235, 979	200, 978	35, 001	20, 648
Nevada.....	3, 252	416	2, 836	2, 518	2, 362	156	38
Oregon.....	11, 454	1, 616	9, 838	9, 739	7, 440	2, 299	1, 493
Washington.....	23, 139	5, 143	17, 996	19, 193	15, 597	3, 601	1, 991
Territories:							
Alaska.....	1, 868	512	1, 356	1, 262	1, 228	34	0
Hawaii.....	699	99	600	519	497	22	15

See footnotes at end of table.



## Continued Unemployment Compensation Claims Received, Weeks Compensated, and Benefits Paid, by State, August 1941—Continued

Social Security Board region and State	Benefits paid				Month and year benefits first payable	Amount of benefits since first payable <sup>1</sup>
	Amount <sup>2</sup>	Type of unemployment				
		Total	Partial and part-total combined <sup>3</sup>	Partial only <sup>4</sup>		
Total.....	\$26,482,777	\$25,066,665	\$1,396,009	-----	-----	\$1,595,958,622
Region I:						
Connecticut.....	184,671	177,145	7,315	\$6,569	January 1938..	24,260,456
Maine.....	75,126	62,615	12,511	9,216	.....do.....	12,148,582
Massachusetts.....	1,394,486	1,354,962	38,128	33,807	.....do.....	90,815,691
New Hampshire.....	44,209	39,657	4,552	4,149	.....do.....	7,342,104
Rhode Island.....	252,884	239,683	13,201	( <sup>5</sup> )	.....do.....	25,498,886
Vermont.....	12,133	11,377	716	367	.....do.....	2,703,360
Region II:						
New York.....	4,874,742	4,874,742	( <sup>5</sup> )	( <sup>5</sup> )	.....do.....	317,920,734
Region III:						
Delaware.....	25,579	22,944	2,611	2,337	January 1939..	1,039,614
New Jersey.....	1,387,968	1,314,359	72,339	( <sup>5</sup> )	.....do.....	40,216,265
Pennsylvania.....	1,310,688	1,310,688	( <sup>5</sup> )	( <sup>5</sup> )	January 1938..	188,759,278
Region IV:						
District of Columbia..	144,472	138,711	5,613	935	.....do.....	6,814,592
Maryland.....	491,832	449,663	41,860	39,327	.....do.....	26,056,376
North Carolina.....	338,853	327,077	11,501	2,578	.....do.....	19,419,642
Virginia.....	230,275	223,102	7,113	1,794	.....do.....	18,259,307
West Virginia.....	208,348	179,716	28,632	27,697	.....do.....	22,645,428
Region V:						
Kentucky.....	202,622	189,876	12,055	4,891	January 1939..	11,589,046
Michigan.....	2,700,397	2,669,962	30,435	25,027	July 1938.....	113,432,722
Ohio.....	706,265	659,524	44,264	( <sup>5</sup> )	January 1939..	57,334,078
Region VI:						
Illinois.....	2,134,142	1,796,875	331,482	201,708	July 1939.....	80,922,513
Indiana.....	551,664	515,386	36,218	( <sup>5</sup> )	April 1938.....	39,560,930
Wisconsin.....	302,978	285,125	17,853	10,675	July 1936.....	21,519,077
Region VII:						
Alabama.....	252,420	239,482	12,772	1,108	January 1938..	19,397,679
Florida.....	755,571	706,634	48,937	( <sup>5</sup> )	January 1939..	13,274,041
Georgia.....	279,946	272,134	7,812	4,105	.....do.....	9,614,597
Mississippi.....	122,874	117,677	5,194	2,726	April 1938.....	6,245,128
South Carolina.....	149,767	137,275	12,482	3,159	July 1938.....	6,262,813
Tennessee.....	405,340	395,092	10,248	2,065	January 1938..	20,019,634
Region VIII:						
Iowa.....	126,630	112,237	14,260	4,111	July 1938.....	13,941,470
Minnesota.....	272,131	246,551	25,580	17,988	January 1938..	31,198,983
Nebraska.....	46,354	43,070	3,222	1,067	January 1939..	4,189,243
North Dakota.....	16,416	14,141	2,275	1,561	.....do.....	1,615,841
South Dakota.....	14,365	12,973	1,367	( <sup>5</sup> )	.....do.....	1,038,989
Region IX:						
Arkansas.....	250,471	241,979	7,871	2,109	.....do.....	6,569,286
Kansas.....	135,704	127,365	8,339	3,840	.....do.....	5,547,638
Missouri.....	498,323	470,715	27,591	22,536	.....do.....	16,087,188
Oklahoma.....	151,933	140,150	11,783	622	December 1938	9,897,330
Region X:						
Louisiana.....	778,286	750,538	27,011	( <sup>5</sup> )	January 1938..	21,289,004
New Mexico.....	46,260	44,076	2,175	696	December 1938	3,069,607
Texas.....	453,578	419,288	34,154	1,542	January 1938..	34,204,640
Region XI:						
Arizona.....	71,381	68,568	2,813	156	.....do.....	5,325,840
Colorado.....	131,133	117,707	13,347	8,817	January 1939..	9,499,057
Idaho.....	38,685	36,565	2,117	76	September 1938	5,880,102
Montana.....	86,692	86,692	( <sup>5</sup> )	( <sup>5</sup> )	July 1939.....	6,133,684
Utah.....	133,918	126,456	7,462	1,423	January 1938..	6,713,300
Wyoming.....	23,687	17,299	6,388	4,927	January 1939..	2,937,916
Region XII:						
California.....	3,276,174	2,941,067	330,185	183,074	January 1938..	166,407,480
Nevada.....	33,013	31,479	1,534	348	January 1939..	2,619,637
Oregon.....	109,590	92,470	16,986	9,958	January 1938..	16,086,672
Washington.....	224,885	191,684	33,201	19,300	January 1939..	20,029,312
Territories:						
Alaska.....	17,381	17,008	373	0	.....do.....	1,125,401
Hawaii.....	5,535	5,404	131	64	.....do.....	675,420

<sup>1</sup> I. e., certification that the claimant has completed a waiting-period week or a compensable period.<sup>2</sup> Benefits for partial and part-total unemployment are not provided by State law in Montana, New York, and Pennsylvania.<sup>3</sup> Includes supplemental payments, not classified by type of unemployment.<sup>4</sup> Adjusted to exclude returned and voided benefit checks.<sup>5</sup> Data for partial unemployment included with data for part-total unemployment.

## COMPULSORY INSURANCE FOR SALARIED AND PROFESSIONAL WORKERS IN BULGARIA

COMPULSORY disability, old-age, and life insurance, for white-collar and professional workers, was provided for in Bulgaria by a law passed January 17, 1941, which was to become effective 4 months later.<sup>1</sup>

In general the law relates to all persons over 16 years of age engaged in professional work requiring more than a high-school education, if they earn at least 800 leva per month. It covers administrative, technical, and managerial personnel; office employees; commercial employees and salesmen whose work requires special training; teachers, artists, and musicians; physicians, dentists, and pharmacists and their assistants; and secretaries and clerks in the professional unions. Persons privately practicing a free profession may be included if their respective general professional organizations ask to be covered. Men who are over 55 years of age and women who are over the age of 50 when first insured are not eligible for disability insurance, but are insurable against old age and death.

Voluntary insurance may be taken out against the three insurable risks by persons who are not over 45 years of age and who are not suffering from any disability which would give rise to a disability pension. This insurance may be taken out by persons working independently whose work is chiefly intellectual, by employers of persons subject to compulsory insurance, by persons who have ceased to be compulsorily insured if they were insured for at least 36 months, and by members of other pension funds, or those whose salary is less than 800 leva per month. Requests for voluntary insurance must be approved by the executive council of the pension fund.

### *Contributions*

The insurance system is financed by joint contributions from employers and insured persons. The total contribution amounts to 12 percent of the salary of the insured person, including cash salary and payments in kind, up to a maximum salary of 10,000 leva per month. The contribution is divided equally between the employer and the insured person. The employee's contribution is deducted by the employer from the salary of the employee, unless the insured person works for two or more employers, in which case the employee is responsible for the payment of the premium, each employer being required to pay his share to the employee.

<sup>1</sup> Data are from report from Walworth Barbour, secretary of the United States Legation, Sofia, Bulgaria.

### *Benefits*

Old-age pensions are payable at age 60 for men and age 55 for women, if they have been insured for at least 60 months. Invalidity benefits are payable for permanent disability amounting to over 50 percent of the capacity of a healthy individual having the same general qualifications in the same or a connected profession, and temporary-disability benefits may be granted for sickness which has lasted for at least 9 months. Death benefits are payable to the husband or wife of an insured person unless he or she remarries; to dependent children up to age 18 (or until their marriage) unless they are incapable of earning their own living, in which case the pension is continued; and to the parents of insured persons if their annual income does not exceed 12,000 leva.

The amount of the old-age pension is determined by the personal account of each insured person, made up of the premiums and interest. Disability pensions amount to a basic sum of 4,000 leva and a supplementary amount equal to 14 percent of the non-interest-bearing regular premiums paid up to the beginning of the pension; and 10 percent of the non-interest-bearing extra premiums paid up to the sixtieth month before the pension begins. The pensions paid to the family of an insured person after his death are based on the old-age or the disability pension (whichever is larger) to which he was entitled, and amount to 40 percent in the case of a husband or wife, 20 percent for each dependent child, or 30 percent if they are full orphans, and 20 percent for parents. The total of these pensions may not exceed the amount of the pension to which the insured person would have been entitled.

### *Administration*

Administration of the pension system is in the hands of a pension council of seven persons, which includes one representative each of employers, employees, and pensioners; and a board of managers. The members of the council with the exception of the chief of the pension fund, are appointed by the Minister of Commerce, Industry, and Labor, who has general charge of the operation of the law.

All funds to the credit of persons formerly insured under the public insurance law will be transferred to the pension fund, with 5 percent compound interest.



## SICK-LEAVE PAY FOR CIVIL-DEFENSE VOLUNTEERS IN GREAT BRITAIN

NEW regulations regarding the payment of civil-defense volunteers in Great Britain during absence on account of sickness or injury were made effective June 1, 1941.<sup>1</sup> Full-time (paid) volunteers may be allowed leave with full pay for a maximum of 13 weeks in any period of 12 months, whether the absence is due to sickness or to injury. No provision is made for compensating part-time (unpaid) volunteers for loss of earnings during sickness or injury sustained off duty.

Whole-time volunteers may receive the equivalent of full pay for a minimum of 8 weeks and a maximum of 13 weeks for a war-service injury. The amount paid will be the allowances due under the personal injuries (civilians) scheme, supplemented by the difference between this allowance and the salary of the worker. A volunteer who does not resume duty at the end of the authorized period will be considered to be discharged from that date. If he subsequently becomes fit for duty he may be reengaged if a vacancy exists. Unpaid volunteers who sustain war-service injury may receive an allowance for loss of earnings caused by incapacity for work. The allowance, together with the injury allowance payable under the personal injuries (civilians) scheme, must not be more than the basic civil-defense rate for full-time paid service. The compensation may be paid for the same periods as those for whole-time volunteers. All volunteers who sustain war-service injuries are eligible for free treatment either in hospitals under the Emergency Hospitals Scheme, or, in the case of minor injuries, in first-aid posts. Medical treatment after discharge from hospitals will ordinarily be provided at out-patient departments. Where this is not possible, free domiciliary treatment may be provided. Volunteers entitled to medical benefit under the National Health Insurance Scheme are expected to avail themselves of that scheme.

<sup>1</sup> Great Britain. *The Local Government Chronicle* (London), July 12, 1941.

## *Employment Services*

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### PLACEMENT WORK OF PUBLIC EMPLOYMENT SERVICES, AUGUST 1941<sup>1</sup>

JOBS filled by State employment services during August exceeded the half-million mark for the second time in 1941. The 509,600 placements during the month were the greatest number made in any month since the initiation of the national defense program, as well as the highest August volume in the history of the service.

Altogether, 3,500,000 placements have been made by public employment offices since the beginning of 1941 and an estimated 2,400,000 different individuals have filled these jobs; in the comparable 1940 period approximately 2,000,000 placements were obtained for 1,500,000 different individuals.

Despite the high August volume of placements for the country as a whole, only 3 of the 10 leading industrial States—California, New York, and Ohio—filled more jobs than in July. Increased demand for harvest hands and placements on construction projects particularly in the Southeast and Gulf area, as well as the expanding defense program, probably accounted for the gains throughout most of the country.

Compared with August 1940, placements increased in all but two jurisdictions—Colorado and Hawaii. Exceptional advances were reported in Arkansas, Kentucky, Louisiana, Mississippi, Nevada, North Carolina, Oregon, Rhode Island, and South Carolina. In these States, placements were from 2 to 4 times as great as in August 1940.

About 283,000 fewer job seekers were registered with the State employment services in August than in July. The total active file as of the end of the month fell to 4,699,000, or 10 percent below the level of August 1940; during the first half of 1941 the active file had ranged narrowly around 5,100,000. The number of applications for jobs received in August—1,455,800—also declined from the previous month but was 14 percent higher than in August 1940.

In August more than 340,000 jobs were filled by men and 169,000 by women. Placements of men were 68 percent greater than those made in August 1940, and placements of women were 32 percent higher. Approximately 68 percent of the jobs filled by men and 60

<sup>1</sup> Prepared by Research and Statistics Division, Bureau of Employment Security, Social Security Board.

percent of the jobs filled by women were expected to last longer than a month; the proportion for women in both July and August was the largest yet attained in 1941 and may indicate that more women are now being hired for factory jobs as labor stringencies intensify. Placements for men were fewer than in August 1940 only in Colorado and Hawaii and for women in Colorado, Georgia, South Dakota, and Vermont. As in most previous months, placements of women exceeded those of men in Delaware, the District of Columbia, and New Jersey.

The active file of men, numbering 3,300,000 at the end of August 1941, was 13 percent lower than on August 31, 1940; the 1,400,000 women registered was 4 percent lower. Male job seekers totaled less than on August 31, 1940, in 38 States, and woman registrants were fewer in 28 States. More than a million applications for work were received from men, a gain of 12 percent over August 1940; the 437,000 filed by women represented an advance of 18 percent.

TABLE 1.—*Summary of Placement Activities of Public Employment Services, August 1941*  
[Data reported by State agencies, corrected to Sept. 22, 1941]

Activity	Number	Percent of change from—		
		July 1941	August 1940	August 1939 <sup>1</sup>
Total complete placements.....	509,587	+2.1	+54.1	+50.7
Regular.....	334,315	+3.5	+78.3	+67.1
Temporary.....	175,272	-.4	+22.3	+26.8
Supplementary placements.....	161,727	+23.4	-4.0	-6.6
Total applications.....	1,445,836	-9.5	+13.5	+11.0
Active file.....	4,699,020	-5.7	+10.0	+19.4

<sup>1</sup> Excludes South Dakota; State agency suspended operations during August 1939.

<sup>2</sup> Excludes Idaho; data not comparable.

TABLE 2.—*Summary of Placement Activities for Veterans, August 1941*

[Data reported by State agencies, corrected to Sept. 22, 1941]

Activity	Number	Percent of change from—		
		July 1941	August 1940	August 1939 <sup>1</sup>
Total complete placements.....	15,925	+0.1	+47.6	+23.6
Regular.....	9,339	+3.9	( <sup>2</sup> )	( <sup>2</sup> )
Temporary.....	6,586	-4.7	( <sup>2</sup> )	( <sup>2</sup> )
Total applications.....	51,604	-.1	+4.9	+18.6
Active file.....	195,311	-2.9	+11.7	+23.8

<sup>1</sup> Excludes South Dakota; State agency suspended operations during August 1939.

<sup>2</sup> Total veteran placements by duration not reported prior to 1941.

<sup>3</sup> Excludes Idaho; data not comparable.



TABLE 3.—Activities of Public Employment Services, All Registrants, by State, August 1941

[Data reported by State agencies, corrected to Sept. 22, 1941]

Social Security Board region and State	Complete placements						Supplemen- tary place- ments	Total applications received		Active file	
	August 1941			January-August 1941				Number	Per- cent of change from July 1941	As of Aug. 31, 1941	Per- cent of change from Aug. 31, 1940
	Num- ber	Percent of change from—		Regu- lar (over 1 month)	Number	Per- cent of change from Janu- ary-August 1940					
		July 1941	August 1940								
Total.....	509,587	+2.1	+54.1	334,315	3,506,541	+53.8	161,727	1,445,836	-9.5	4,609,020	-10.0
Region I:											
Conn.....	8,276	-15.8	+53.2	5,981	68,506	+75.3	5	19,860	-24.2	40,495	-45.0
Maine.....	4,441	-10.2	+62.4	3,085	29,090	+92.2	11	8,428	-7.7	21,530	-18.8
Mass.....	9,115	-13.4	+92.4	7,721	69,102	+132.7	28	56,714	+12.6	122,304	-31.5
N. H.....	2,777	-2.7	+13.3	2,287	17,022	+8.4	57	4,914	-6.3	10,371	-38.5
R. I.....	1,914	-13.1	+142.0	1,676	16,602	+193.1	0	6,628	-23.2	28,136	-42.0
Vermont.....	1,231	-6.7	+30.8	837	8,841	+25.6	10	2,068	-19.2	6,317	-46.0
Region II:											
New York.....	49,938	+2.5	+55.8	30,701	349,253	+76.6	2,110	142,805	-22.0	447,809	-19.8
Region III:											
Delaware.....	1,545	+8.2	+34.0	800	11,610	+33.5	114	2,820	+4	7,317	-16.7
New Jersey.....	15,774	-6.5	+81.1	10,156	122,010	+71.8	29	40,966	-15.3	169,329	-32.0
Penn.....	19,694	-9.7	+54.1	15,108	150,665	+56.0	1,181	94,218	-6.6	288,839	-23.9
Region IV:											
Dist. of Col.....	4,991	-5	+19.1	2,364	41,612	+41.3	4	10,696	-18.1	21,746	-21.9
Maryland.....	7,556	+10.3	+78.1	5,105	48,911	+66.5	972	25,488	+7.2	31,369	-49.4
N. C.....	14,311	+32.1	+119.1	11,453	132,219	+178.0	4,065	36,428	-2.8	97,641	+2.7
Virginia.....	13,003	-6.3	+91.0	10,368	88,948	+121.9	301	23,809	+5.6	61,639	+10.7
W. Va.....	4,020	-12.8	+44.2	2,637	29,757	+44.8	135	13,844	-17.0	61,600	-13.3
Region V:											
Kentucky.....	5,094	+9.9	+113.8	4,097	31,179	+52.6	119	17,995	-3.3	87,176	-4.0
Michigan.....	13,724	-13.6	+12.4	9,339	110,313	+34.1	923	49,388	-18.1	125,289	-43.4
Ohio.....	25,634	+2.6	+70.1	16,278	186,836	+66.4	460	64,936	-11.2	236,102	-37.2
Region VI:											
Illinois.....	20,813	-6.0	+55.8	11,907	168,616	+64.0	1,321	95,115	-3.4	201,372	+15.5
Indiana.....	12,671	-2.0	+66.0	8,827	99,681	+70.3	2,418	35,386	-17.6	222,258	+63.5
Wisconsin.....	11,434	(?)	+47.5	6,836	76,203	+47.5	498	25,736	-22.2	79,634	-19.2
Region VII:											
Alabama.....	6,110	+11.3	+48.8	5,058	43,434	+23.2	557	25,968	-26.6	102,270	-2.0
Florida.....	5,405	+2.8	+52.3	4,200	46,778	+100.0	181	16,984	-19.1	118,412	+78.5
Georgia.....	13,341	+30.3	+14.8	9,890	76,021	+16.6	292	31,307	+5.9	99,809	-38.2
Mississippi.....	10,857	+14.3	+189.4	10,317	42,253	+40.1	294	25,259	-26.8	78,446	+19.7
S. C.....	9,469	+21.9	+308.1	8,192	60,285	+173.7	371	17,878	+3.7	54,361	+3.0
Tennessee.....	6,955	-3.4	+28.7	4,880	66,474	+69.4	5,919	21,286	-7.3	131,991	+25.7
Region VIII:											
Iowa.....	8,612	-5.6	+35.0	4,986	61,689	+22.2	597	22,442	(?)	71,882	+3.7
Minn.....	10,914	-2.7	+32.9	5,083	60,157	+30.3	790	32,245	+2	85,526	-31.7
Nebraska.....	4,405	-18.5	+29.2	2,445	26,528	+23.2	172	8,964	+1.1	43,818	+9
N. Dak.....	12,676	+112.4	+15.1	2,559	31,131	+22.8	307	15,438	+116.0	24,346	-2.4
S. Dak.....	2,967	+10.8	+18.2	1,336	13,841	+23.8	1,102	5,462	+34.9	17,435	-30.3
Region IX:											
Arkansas.....	7,660	+4.0	+127.2	4,676	52,170	+43.7	6,251	27,851	-8.5	105,320	+222.9
Kansas.....	6,675	-24.3	+47.4	3,334	55,044	+79.1	405	24,875	+14.0	63,435	+3.4
Missouri.....	14,219	-5.2	+64.8	10,081	113,789	+89.2	1,162	56,026	+2.9	207,976	+16.4
Oklahoma.....	4,786	-8.3	+12.8	2,430	33,509	-16.7	1,653	29,845	-15.7	97,176	+21.3
Region X:											
Louisiana.....	7,055	+16.0	+140.1	5,286	48,289	+81.4	710	24,492	-32.9	141,925	+71.7
N. Mex.....	1,974	+23.4	+46.5	995	12,593	+31.8	1,389	3,725	+8.2	25,603	-24.3
Texas.....	36,608	-3.4	+34.3	23,134	258,977	+15.3	53,675	78,386	-14.3	376,171	+67.9
Region XI:											
Arizona.....	2,133	-6.3	+24.6	1,128	20,501	-2.7	1,544	4,145	-11.8	16,082	-18.3
Colorado.....	4,456	+3	-47.7	2,864	33,041	-15.2	6,300	11,745	-15.2	47,589	-14.1
Idaho.....	4,268	+5.7	+27.1	2,105	23,766	+16.6	5,425	3,007	-11.5	23,464	(?)
Montana.....	3,626	-15.1	+42.1	2,306	18,779	+28.0	599	6,305	+21.1	11,087	-37.7
Utah.....	2,959	-3.4	+59.8	1,640	17,483	+52.6	346	7,525	-9.2	20,055	-1.9
Wyo.....	2,457	+47.4	+52.6	1,965	12,325	+62.2	79	3,164	-9	5,249	-11.9
Region XII:											
California.....	43,725	+19.4	+61.8	26,936	262,554	+64.2	13,632	116,507	-3.0	304,875	-30.2
Nevada.....	2,640	-5.5	+97.6	1,638	14,341	+54.4	179	3,347	-10.6	3,075	-44.9
Oregon.....	13,179	+12.3	+128.6	10,570	68,708	+73.6	30,986	16,679	-7.8	21,120	-31.5
Wash.....	9,535	-10.2	+60.0	5,207	59,682	-10.5	12,010	23,806	-11.4	28,204	-71.3
Territories:											
Alaska.....	984	-8.6	+34.0	730	7,304	+55.3	27	1,342	-10.9	1,023	-5.7
Hawaii.....	981	+4.9	-2.0	811	8,119	+20.0	12	1,589	+8.5	3,022	-65.3

<sup>1</sup> Excludes Idaho; data not comparable.<sup>2</sup> Decrease of less than 0.05 percent.<sup>3</sup> Data not comparable.

TABLE 4.—Activities of Public Employment Service for Veterans, by State, August 1941

[Data reported by State agencies, corrected to Sept. 22, 1941]

Social Security Board region and State	Complete placements			Total applica- tions re- ceived	Active file		
	Number	Percent of change <sup>1</sup> from—			As of Aug. 31, 1941	Percent of change <sup>1</sup> from—	
		July 1941	August 1940			July 31, 1941	Aug. 31, 1940
Total.....	15,925	+0.1	+47.6	51,604	195,311	-2.9	+11.7
Region I:							
Connecticut.....	306	-7.0	+67.2	648	1,337	0	-56.7
Maine.....	122	-8.3	+38.6	310	983	-16.8	-38.7
Massachusetts.....	214	-5.3	+78.3	3,197	8,619	+35.8	+69.4
New Hampshire.....	146	+43.1	+27.0	203	501	-18.8	-21.0
Rhode Island.....	41			217	732	-17.2	-34.9
Vermont.....	37			78	288	-16.8	-50.2
Region II:							
New York.....	1,214	+11.6	+112.6	2,859	12,329	+8.4	-16.2
Region III:							
Delaware.....	30			119	277	+5.3	-6.7
New Jersey.....	294	-7.2	+135.2	1,021	5,772	-13.3	-26.5
Pennsylvania.....	511	-7.1	+44.4	3,646	11,469	-14.1	-25.8
Region IV:							
District of Columbia.....	214	+7.5	+49.7	530	1,193	-8.9	-30.4
Maryland.....	172	-4.4	-10.9	1,079	1,236	+8.6	-46.7
North Carolina.....	294	+22.5	+127.9	758	3,079	-5.8	+37.9
Virginia.....	161	-10.0	0	298	1,053	-9.9	-25.7
West Virginia.....	66	-21.4	+10.0	453	2,956	+2.0	-19.6
Region V:							
Kentucky.....	163	+7.9	+147.0	744	3,538	-3.5	-5.1
Michigan.....	553	-15.3	+23.2	2,128	7,645	-3.8	-20.9
Ohio.....	945	+9	+82.8	2,249	11,294	-6.8	-41.1
Region VI:							
Illinois.....	645	-13.6	+79.2	3,822	7,712	+2.6	+2.0
Indiana.....	268	-14.1	+35.4	908	9,688	-2.5	+69.2
Wisconsin.....	354	-10.6	+45.1	1,055	5,729	-8.5	-2.2
Region VII:							
Alabama.....	146	+5.8	+43.1	820	4,188	-4.2	-5.4
Florida.....	173	+24.5	+49.1	559	5,734	-5.8	+115.4
Georgia.....	290	+47.2	+18.9	765	2,635	-15.2	-41.2
Mississippi.....	273	+3.0	+313.6	698	2,415	-6.5	+27.5
South Carolina.....	186	+3.3	+186.2	339	1,214	-4.1	-24.9
Tennessee.....	159	+1.3	+23.2	522	4,364	-4.5	+8.2
Region VIII:							
Iowa.....	561	+4.5	+32.6	942	4,101	+1.4	-6.3
Minnesota.....	398	-1.7	+9.3	2,030	5,435	-6	-32.2
Nebraska.....	263	-26.3	+102.3	361	2,309	-4.1	-6.1
North Dakota.....	419	+109.5	+38.3	419	997	-14.8	-6.9
South Dakota.....	106	+9.3	-4.5	184	968	-11.8	-25.0
Region IX:							
Arkansas.....	275	+42.5	+281.9	1,583	4,620	+24.6	+251.6
Kansas.....	242	-28.0	+41.5	1,107	3,449	+13.8	-8.1
Missouri.....	615	-14.9	+89.2	2,383	9,084	-5.0	+5.2
Oklahoma.....	213	+12.1	+30.7	1,415	5,585	+17.7	+7.7
Region X:							
Louisiana.....	125	+28.9	+135.8	561	4,302	-2.9	+73.1
New Mexico.....	39			151	1,467	+4.4	-20.1
Texas.....	889	-16.3	-1.3	1,962	10,871	-4.0	+58.7
Region XI:							
Arizona.....	98	-3.0	+11.4	204	1,044	-9.5	-15.2
Colorado.....	220	+34.1	-8.3	519	1,863	+5.3	-32.6
Idaho.....	232	-1.3	-9.7	134	1,461	-22.8	( <sup>2</sup> )
Montana.....	201	-19.9	+12.9	386	681	-4	-36.4
Utah.....	124	+27.8	+15.9	177	827	-18.1	-23.6
Wyoming.....	120	+73.9	+33.3	132	230	-25.8	-29.0
Region XII:							
California.....	1,882	+9.5	+71.9	5,112	14,897	-9.4	-42.1
Nevada.....	125	-12.0	+5.9	172	160	-3.6	-40.1
Oregon.....	425	-7.4	+7.0	587	1,355	-20.9	-39.0
Washington.....	331	-2.4	+39.7	992	1,432	-18.7	-68.7
Territories:							
Alaska.....	34			43	34		
Hawaii.....	11			23	159	+5.3	-64.0

<sup>1</sup> Computed only for States reporting 50 or more in both months.<sup>2</sup> Excludes Idaho; data not comparable.<sup>3</sup> Data not comparable.

## Recreation

### COMMUNITY RECREATION IN THE UNITED STATES, 1940

TOTAL expenditures from regular funds, public or private, for community recreation in 1940 amounted to slightly more than \$31,250,000 as compared with nearly \$32,000,000 the previous year. The report of the National Recreation Association for the year<sup>1</sup> covers the activities in 1,116 communities which had play leadership or supervised recreation facilities. That the importance of full-time year-round leadership is receiving increased recognition is shown by the fact that there were 3,559 such leaders in 1940—a larger number than had been reported in any previous year. Of this number 2,119 were men and 1,440 women.

During 1940, 24,533 leaders were paid from regular funds as compared with 25,042 in 1939. Of these workers 14,503 were men and 9,530 were women. Local recreation authorities continued to supplement their regular staff through the use of leadership personnel provided by emergency agencies. There were 14,393 such leaders in 1940, of whom nearly 9,000 were men. Volunteer workers numbered 35,054 as compared with less than 25,000 in 1938.

There was a total of 9,921 outdoor playgrounds under leadership, or 172 more than were reported in the preceding year. The number of playgrounds for white and mixed groups, open under leadership during the school year only, increased 12 percent; those open only during the summer increased 6 percent over the previous year. A decrease of 4 percent in the number of white playgrounds open the year round is explained by the reduction in number of WPA leaders in many cities. The attendance of participants and spectators at the playgrounds during the periods they were under leadership was approximately 348,000,000. The number of recreation buildings open under leadership (1,750) and the number of cities reporting such buildings (421) show increases over the preceding year. The total attendance reported at 1,233 recreation buildings by persons taking part in activities was over 60,000,000. Indoor recreation centers in buildings not used exclusively or primarily for community recreation activities, reported by 459 cities, numbered 3,986. Although there

<sup>1</sup> Recreation (New York), June 1941. Year Book number [Annual report of the National Recreation Association].



were 137 fewer indoor centers open under leadership in 1940 than in 1939, 15 more cities reported such centers. The reduction in the number of centers is explained by the closing of 132 centers by the New York City Board of Education because of lack of funds, and the failure of the British Columbia Education Department, which conducted 174 indoor centers in 1939, to report. The total yearly or seasonal attendance at 1,567 centers was 17,501,904. The majority of these centers were open three or more sessions weekly.

With the exception of certain winter-sports facilities, practically all of the areas developed for special recreation use were reported in greater numbers than for the preceding year. The most important of these facilities from the standpoint of the numbers participating were ice-skating areas, athletic fields, baseball and softball diamonds, bathing beaches and swimming and wading pools, picnic areas, golf courses, handball, horse-shoe and shuffle-board courts, and tennis courts.

## Labor Conferences

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### 1941 CONVENTION OF AMERICAN FEDERATION OF LABOR

AID for national defense and unqualified support of President Roosevelt's foreign policy were the outstanding features of the sixty-first annual convention of the American Federation of Labor, in Seattle, October 6-16. The attitude of the Federation on these two subjects was expressed by the convention on numerous occasions, in a variety of forms. The executive council, in the introduction to its annual report, said in part:

All of our problems and our lives in the immediate future will be overshadowed and dominated by the necessity of protecting our liberties and our institutions against the world-wide menace created by the efforts of a few nations to dominate adjacent peoples. Serious as this situation is, the American Federation of Labor stands ready to do its part in complete confidence that the spirit of a free people cannot be crushed, and that victory will bring broader and more stable world institutions assuring freedom in life and work.

The readiness of the American Federation of Labor to do everything in its power in support of national defense was emphasized by President Green in his opening speech, in his radio reply to President Roosevelt's message to the convention, in his presidential speech of acceptance for the 1941-42 term, and in his address at the close of the convention. It was stressed by every guest speaker addressing the convention, and was directly or indirectly the subject matter of more than a dozen resolutions. Perhaps the clearest expression of the Federation's desire to cooperate with the administration in the present world crisis may be found in the resolution introduced by the Vermont State Federation of Labor and adopted unanimously by the convention: "*Resolved*, That the American Federation of Labor go on record as commending the stand of President Roosevelt in urging increased aid to Britain, the Soviet Union, and China for victory over Hitlerism, and we declare ourselves ready to join with the people of our organizations in support of President Roosevelt's policy." The convention, however, made it clear that this resolution "should not and must not be accepted as any change in our attitude toward communism."

Regarding the role of labor in bringing about a just peace among nations, it was resolved to "inform the President of the United

States that at the conference table at the ending of this world conflict, labor must have its representation because labor is enormously concerned \* \* \* as labor has more at stake than any other branch of society." In the same resolution the convention instructed the executive council of the A. F. of L. to select a representative from labor men and to present his name to the President of the United States.

### Membership Growth

During the year ending August 31, 1941, the total paid-up membership of the affiliated national and international unions and of the directly chartered trade and federal unions of the American Federation of Labor advanced from 4,247,443 to 4,569,056. This was a gain of 321,600 members during the year and an increase of nearly half a million members over the peak established in 1920.

On the basis of the per capita tax paid to the A. F. of L. the following national and international unions recorded increases of 10,000 or more members during the year:

	<i>Increase in membership</i>
International Association of Machinists.....	31, 700
International Hod Carriers, Building and Common Laborers' Union of America.....	21, 800
International Brotherhood of Teamsters, Chauffeurs, Warehousemen and Helpers of America.....	14, 600
Amalgamated Meat Cutters and Butcher Workmen of North America..	14, 000
Brotherhood of Railway and Steamship Clerks, Freight Handlers, Express and Station Employees.....	13, 000
International Protective Association of Retail Clerks.....	11, 700
International Molders' Union of North America.....	11, 700
Hotel and Restaurant Employees' International Alliance and Bartenders' International League of America.....	11, 600
International Association of Bridge and Structural Iron Workers.....	10, 700

Many unions reported no change in their membership. Among these were some of the larger unions in the Federation, such as the carpenters and joiners (300,000 members), musicians (100,000 members), operating engineers (80,000 members), and railway carmen (65,000 members). Some unions reported a loss in membership. Among these was the Brotherhood of Electrical Workers, whose paid-up membership declined by nearly 9,000 during the year.

### Constitutional Changes

*Per capita tax.*—On the recommendation of the executive council, the convention adopted an amendment to the constitution lowering the monthly per capita tax on national and international unions from 2 cents to 1½ cents for each member up to 300,000 and 1 cent for each member in excess of 300,000. This year only one organization, the



International Brotherhood of Teamsters, reported a membership of more than 300,000.

The monthly tax on the federal and local unions chartered directly by the A. F. of L. also was reduced from 36 cents to 35½ cents per member. At the same time, that portion of the tax which is set aside for use only in the case of a strike or a lock-out was lowered from 12½ cents to 8½ cents per member per month.

*Executive council.*—The convention adopted the recommendation of the executive council, to reduce the number of vice presidents of the Federation from 15 to 13. As the president and secretary-treasurer of the Federation are also members of the executive council, this amendment reduced the membership of the executive council from 17 to 15.

### *Jurisdictional Disputes*

The question as to which union should have jurisdiction over the work involved in building, assembling, erecting, dismantling, and repairing machinery, which has been a subject of controversy before A. F. of L. conventions since 1914, again flared up in a heated discussion from the floor. This issue arose through a resolution submitted by the delegates of the International Association of Machinists, requesting the convention to reaffirm the position taken by the 1914 convention, giving the members of this organization the jurisdiction over the work involved in repairing, erecting, assembling, and dismantling machinery, and restricting other organizations from infringing upon the rights of the machinists. The resolutions committee which handled the problem recommended, and the convention decided, that the matter be again referred to the executive council "for the purpose of bringing about conferences and through these conferences a settlement of the dispute reasonably satisfactory to all concerned." The dispute between the International Association of Machinists and the Amalgamated Association of Street and Electric Railway Employees over the jurisdiction of workers employed in machine shops, repair shops, bus terminals, service stations, and garages was also referred to the incoming executive council.

### *Suspension of Brewery Workers*

The jurisdictional dispute between the teamsters and the brewery workers' unions came before the convention on the morning of the last day. The president of the International Brotherhood of Teamsters moved that the convention reaffirm its 1939 decision that the Brewery Workers International Union be suspended from the A. F. of L. until such time as it complies with the order of the executive council, transferring the jurisdiction over drivers employed in breweries to the teamsters' union. Because of pending litigation over the matter in

the courts of the United States, the executive council was not in a position to enforce this decision of the 1939 convention. After more than 2 hours of debate, the convention, by a roll-call vote, decided in favor of the teamsters' union, and the brewery workers were thus automatically suspended from the American Federation of Labor. It has been estimated that this jurisdictional dispute between the teamsters' and the brewery workers' unions involves approximately 5,000 workers engaged as drivers in the brewery industry.

### *Discrimination Against Negro Workers*

The problem of full employment opportunities for Negro workers, and their admission into trade-unions was discussed by delegates from several unions. The question was raised in a speech by Mark Etheridge, chairman of President Roosevelt's Committee on Fair Employment Practices.<sup>1</sup> He described in detail the policies and progress of the Office of Production Management with regard to obtaining employment for colored workers in industries engaged in national defense. He stated, in part:

I wish I could tell you that the mere enunciation of the policy by the President had resulted in its universal acceptance, but I cannot do so in truth. There are still areas and local situations in which grave and gross discrimination is practiced. There has been a wide response and there has been a good deal of the breaking down of barriers, but there are still employers who have no more conception of what this Nation stands for than to specify that they will accept only "white, Christian" applicants. Unfortunately, too, there are still many unions and many locals of unions, not all of them engaged directly in the defense effort, which bar their fellow men because of color. I would not be frank at all with you if I did not say that most of them are yours.

During the afternoon of the same day, the resolutions committee reported on the resolution submitted by the delegates of the Brotherhood of Sleeping Car Porters, urging the formation by the A. F. of L. of a permanent committee to deal with discrimination on account of race, color, religion, and national origin. The duties of this committee, under the resolution would be to hold hearings and investigate all cases of racial, religious, etc., discrimination, involving membership in the union and affecting employment opportunities, and to report its findings to the Federation, with recommendations for specific action. Concerning this proposal the resolutions committee recommended that the convention reaffirm the stand of previous conventions. Philip Randolph, president of the Brotherhood of Sleeping Car Porters, then presented a list of specific cases in which Negro workers were kept out of employment because the local union refused to admit them to membership. The cases mentioned involved

<sup>1</sup> Other members are of William Green, president of the A. F. of L.; Phillip Murray, president of the C. I. O.; Milton P. Webster, vice president of the Brotherhood of Sleeping Car Porters; Earl Dickerson, Chicago lawyer; and David Sarnoff, president of the Radio Corporation of America.

many of the largest and most important unions affiliated with the American Federation of Labor, including those of the machinists, carpenters, and painters.

### *Election of Officers*

All the members of the executive council, except George E. Browne, president of the International Alliance of Theatrical Stage Employees, were reelected. A contest developed for the position of the eleventh vice president—Mr. Browne and Edward Flore, president of the Hotel and Restaurant Employees Union. On a roll call, Mr. Flore was elected by a vote of 37,950, against 421 in favor of Mr. Browne (all cast by members of his organization).

As in the 1940 convention, no fraternal delegates were elected to the British Trades Union Congress or to the Canadian Trades and Labor Congress, their selection being left to the executive council.

Toronto, Canada, was designated as the convention city for 1942.



# Labor Laws and Court Decisions

## LEGISLATIVE SESSIONS IN 1942

DURING 1942 regular legislative sessions will be held in eight States (Kentucky, Louisiana, Mississippi, New Jersey, New York, Rhode Island, South Carolina, and Virginia), and in Puerto Rico and the Philippines. The second session of the Seventy-seventh Congress will convene on January 3, 1942, unless a different date is set by a Congressional resolution.

Most of the States, as well as Alaska and Hawaii, hold biennial sessions and meet in odd-numbered years. The Legislature of South Carolina will meet during the coming year, but as the result of a constitutional amendment, sessions will be held biennially in odd-numbered years beginning with 1943.

The terms of the legislative sessions meeting in 1942 are limited to 60 days in Kentucky, Louisiana, Rhode Island, and Virginia. In the other four States, there is no limit as to the length of time the legislature may stay in session. All of the State legislatures meeting in 1942 will assemble in January, with the exception of the Louisiana Legislature which meets in May.

The following table shows the State legislatures meeting in regular session in 1942, as well as the date of convening, and the length of the session wherever fixed by law.

*Dates Set by Law for Convening of State Legislatures*

State	Time of assembly fixed by law	Date of convening 1942 session	Length of session
Kentucky.....	Tuesday after first Monday in January.....	Jan. 6	60 days.
Louisiana.....	Second Monday in May.....	May 11	Do.
Mississippi.....	Tuesday after first Monday in January.....	Jan. 6	No limit.
New Jersey.....	Second Tuesday in January.....	Jan. 13	Do.
New York.....	First Wednesday in January.....	Jan. 7	Do.
Rhode Island.....	First Tuesday in January.....	Jan. 6	60 days.
South Carolina.....	Second Tuesday in January.....	Jan. 13	No limit. <sup>1</sup>
Virginia.....	Second Wednesday in January.....	Jan. 14	60 days. <sup>2</sup>

<sup>1</sup> State constitution provides that members of general assembly may not receive compensation for more than 40 days in any 1 session.

<sup>2</sup> May be extended up to 30 days by a three-fifths vote in each house.

## COURT DECISIONS OF INTEREST TO LABOR

*Utah Wage-Payment Law Constitutional*

A STATUTE of Utah requiring the payment of wages at specified times was recently held constitutional by the State supreme court.<sup>1</sup> The act requires employers to pay wages at stated intervals and makes it a misdemeanor to fail to pay wages promptly when due. Banks and mercantile houses are excluded from the operation of the law, and the contention of unconstitutionality arose because of this exclusion. However, the court ruled that this classification of employers was not unreasonably discriminatory.

The court pointed out that the evident purpose of the act was to assure to employees prompt payment of the wages they are entitled to receive. A study of the history of this legislation, however, did not reveal the reason for the exclusion of banks and mercantile houses. In considering the history of the act, the court suggested several reasons for these exclusions. The legislature might have considered that there were large numbers of seasonal or casual workers employed in the included classes who were in greater need of regular and prompt payment of their wages. Again, banks are considered to be financially responsible, and because of banking laws the legislature might regard their employees as better protected against loss of earnings. As to mercantile houses, the court pointed out that they carry on hand a stock of merchandise to which the employee could have recourse for eventual payment. Furthermore, mercantile establishments are dependent to a great extent on the good will of the public and hence would pay promptly the earnings of their workers. For these reasons, the court concluded that the act does not evidence an arbitrary selection of the excluded classes.

*Labor Unions Under Sherman Antitrust Act*

The Sherman Antitrust Act was recently held to apply to a conspiracy between labor unions and nonlabor groups to restrict interstate commerce by setting up a "restricted system of distribution" of plumbing supplies.<sup>2</sup> In this case, which was decided by the United States District Court for the Northern District of Ohio, it was held that an indictment against labor unions stated an offense under the act. The labor unions, the indictment charged, had refused to permit union members to install supplies which were not sold in conformity with the restrictive agreements between the unions and their co-conspirators.

In its decision, the court declared that no exemption exists in favor of labor associations as far as this offense is concerned. Although a

<sup>1</sup> *State of Utah v. J. B. and R. E. Walker, Inc.* (116 Pac. (2d) 766).

<sup>2</sup> *United States v. Central Supply Association.*

labor union is not forbidden to strike or bargain collectively because the indirect or incidental effect of such action would be to restrain interstate commerce, it has no right to enter into a conspiracy for the purpose of restraining and hampering the free flow of interstate commerce. The court further declared that the right of laborers to assert a collective force for the protection of their interests "must not be construed as a license to create a monopoly or to conspire for the restraint of trade."

### *Picketing by Rival Union Against Closed Shop Held Legal*

The Superior Court of Los Angeles County, Calif., held, in a recent decision, that peaceful picketing by labor unions affiliated with the American Federation of Labor to compel an employer to cancel a closed-shop contract with an independent union and to enter into one with the A. F. of L., is lawful.<sup>3</sup> This ruling was based on the ground that such picketing was an exercise of the constitutional right of free speech. The court also held that the case involved a "labor dispute" and not a "jurisdictional dispute," and therefore the employer was not entitled to an injunction. The State supreme court has in a number of cases upheld the right of peaceful picketing to establish a closed shop, but this is the first case in which picketing to obtain cancellation of a closed-shop contract has been held lawful.

The decision in this case pointed out that "picketing peacefully and truthfully" is one of organized labor's lawful means of advertising its grievances to the public. Such peaceful labor tactics, the court declared, are lawful, even though they have the effect of inducing breaches of contract between employer and employees. The picketing in this case was, therefore, held to be justifiable and protected by the constitutional guaranties of free speech.

### *Insurance Agents Held To Be Under Unemployment-Compensation Act*

The Supreme Court of Appeals of Virginia has held that services performed by industrial life insurance agents constitute "employment" under the State Unemployment Compensation Act.<sup>4</sup> In this case the claimant was an industrial life insurance agent performing services for a life insurance company under a contract of hire which provided that his status should be that of an independent contractor. His compensation consisted of commissions received from the collection of weekly premiums of policyholders in a designated territory. He had to report daily to the office of the district manager supervising his district and was required to file weekly a written report of business transacted.

<sup>3</sup> *Los Angeles County Fair Association v. Pomona Valley Central Labor Council*.

<sup>4</sup> *Life and Casualty Insurance Co. v. Unemployment Compensation Commission* (16 S. E. (2d) 357).



In holding that the agent was an employee, and thus entitled to unemployment compensation, the court said that—

In determining the meaning of "employment" we are bound by the statutory definition of that word rather than by the common-law meaning of the master and servant relation.

The act defines "employment" as service performed by an individual for remuneration unless he is free from control over the performance of the service, or engaged in "an independently established trade, occupation, profession, or business." For these reasons, the court held that, within the meaning of the Unemployment Compensation Act, the agent was an employee and not an independent contractor.

## Cost of Living

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### HOUSING OF FEDERAL EMPLOYEES IN THE WASHINGTON (D. C.) AREA IN MAY 1941

By JEROME CORNFIELD and MARJORIE WEBER,<sup>1</sup> *Bureau of Labor Statistics*

SINCE the spring of 1940, the rapid expansion in Federal employment as a result of the national defense program has added greatly to the problem of finding suitable housing both for newcomers and for residents of longer standing in the Washington area. This problem was a difficult one for the lower-paid employees even before the influx of new Government workers, because of the relatively high level of rents in this area and the scarcity of dwelling units in the low-rent ranges.

Recognizing the acute situation, the Bureau of Labor Statistics, at the request of the Office of Price Administration and the Federal Housing Coordinator, undertook in June 1941 a survey of living arrangements and rents among Federal employees in the executive departments of the Government. This survey was designed to provide information for the Committee on the District of Columbia of the House of Representatives, which was considering rent-control legislation for the District. The survey was conducted by means of a questionnaire distributed to about 15,000 employees whose names were selected at random from the pay-roll lists of all the executive departments and agencies. Approximately 10,000 usable replies were received. Workers whose names were drawn were asked to provide information relative to the date of their employment in the Federal service and of their residence in the Washington area; their living arrangements and home tenure at the end of May 1941 and approximately a year earlier; their Federal earnings, and total family income for May 1941. Those living in rented quarters were asked also to supply information on rent paid and certain facts about the accommodations in the quarters which they occupied at the end of May, as well as information on changes in rent and in living accommodations between April 1940 and May 1941.

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<sup>1</sup> Prepared in the Prices and Cost of Living Branch, Arnyess Joy, chief,<sup>1</sup> with the assistance of the staffs of the Retail Price and Cost of Living Divisions. Additional detailed tables are given in Serial No. R. 1374.

This survey confirmed reports from other sources that the high level of rents in the Washington area, rather than recent increases in rents, was the principal cause of complaint about the local housing situation. It showed that only about 7 percent of the Government workers occupying houses and apartments were paying less than \$30 per month, and that 44 percent were paying \$50 or more. As a result, families with incomes under \$150 per month were devoting nearly one-third of their income to rent. Since newcomers to the Federal service typically have considerably lower incomes than do employees of longer standing, their housing problem was particularly acute. The majority of the new employees were living in rooms or in boarding houses. Although this choice of quarters is explained both by their relatively low incomes and by the fact that they are usually young and unmarried, the scarcity of satisfactory quarters at rents which they could afford to pay was also an important factor. As a rule, rents in the Washington area were much higher than those paid in the communities from which they came. This prevented many new workers who are married from bringing their families with them. Many reported, in special comments, that rental costs more than absorbed the increase in earnings which the Federal appointment provided.

In spite of the greatly increased demand for living quarters, rents paid by Federal employees who lived in the Washington area throughout the period were relatively stable between April 1940 and May 1941. For houses and apartments, there were comparatively few rent increases. The effect of the influx of newcomers is seen, however, in the fact that rent increases were quite frequent for rooms and for room and board. There has also been some overcrowding in rooming houses. Thus, 17 percent of Federal workers living in rooming and boarding houses reported 8 or more persons sharing the same bathroom.

Although very few rent increases were reported by tenants of houses and apartments, there were some reports of prospective raises for the autumn leasing period. New residents who reported rents paid in their former community as well as those paid in the Washington area, almost invariably had substantially higher outlays in Washington.

### *Scarcity of Housing*

The influx of so many new Federal workers has put great pressure on the housing accommodations in the Washington area. Many of these newcomers have been unable to make suitable living arrangements within their means. The magnitude of the problem as it affects Federal employees is indicated by the fact that one-third of all persons



employed by the Federal Government at the end of May 1941 had begun their employment in the service within the previous 13 months. Of these, more than three-fifths were drawn from outside the Washington area. The remaining two-fifths were recruited from among local residents. It is estimated that at the end of May, there were approximately 35,000 workers engaged in the executive branch of the Federal service who were newcomers to the Washington area. Thus, approximately 1 Federal employee in every 5 was a newcomer and represented an addition to the demand for housing accommodations within the year.

Throughout this period there had been a continuous decline in the vacancy rate for rental properties in the area, indicating that the provision of new housing had not kept pace with the growth of population. In a normal rent market, approximately 5 percent of the rental housekeeping units are vacant and for rent. By January 1941, however, the vacancy rate for the District of Columbia was estimated at 1.9 percent, as compared with 5.4 percent the previous April.<sup>2</sup> With such a low vacancy rate, families of newcomers to the area were severely restricted in their choice of homes and were often compelled either to spend more than they were accustomed to spend for rent or to accept less satisfactory housing accommodations.

### *Federal Workers' Incomes*

The problem has been especially acute for these newcomers, not only because of their limited knowledge of the area, but also because their incomes are low as compared with those of established employees.<sup>3</sup> Thus, more than seven-tenths of the newcomers to the Washington area had family incomes of less than \$150 a month, as compared with four-tenths of the Federal employees who had lived in this area for a longer period of time. These differences are due largely to the comparatively low level of their earnings from Federal employment, since only a small group of families had other income of any consequence. More than two-thirds of the employees who came on the Government pay roll after March 1940 were paid less than \$130 per month, and only 1 in 8 received more than \$180.

<sup>2</sup> The April 1940 vacancy rate is from the 1940 Census. The January 1941 rate is from a Work Projects Administration survey of that date.

<sup>3</sup> Income for May 1940 was requested from all Federal employees included in the study. Those living as members of a family group were asked to report the earnings and other income of all related persons living with them. Employees living alone reported their own earnings and any other income received by them. The income data obtained thus represents "family income," using the term family to include persons living alone.

Among the established employees, on the other hand, fewer than one-fourth earned less than \$130 per month and almost one-third were earning more than \$180.

For Negro employees, whose earnings are considerably less than those of white employees, the income differences between the newer and older employees were less pronounced. Both among the established employees and among those whose service began recently, almost three-fourths had incomes of less than \$120 per month and one-fourth had individual earnings from Federal employment of less than \$100 per month.

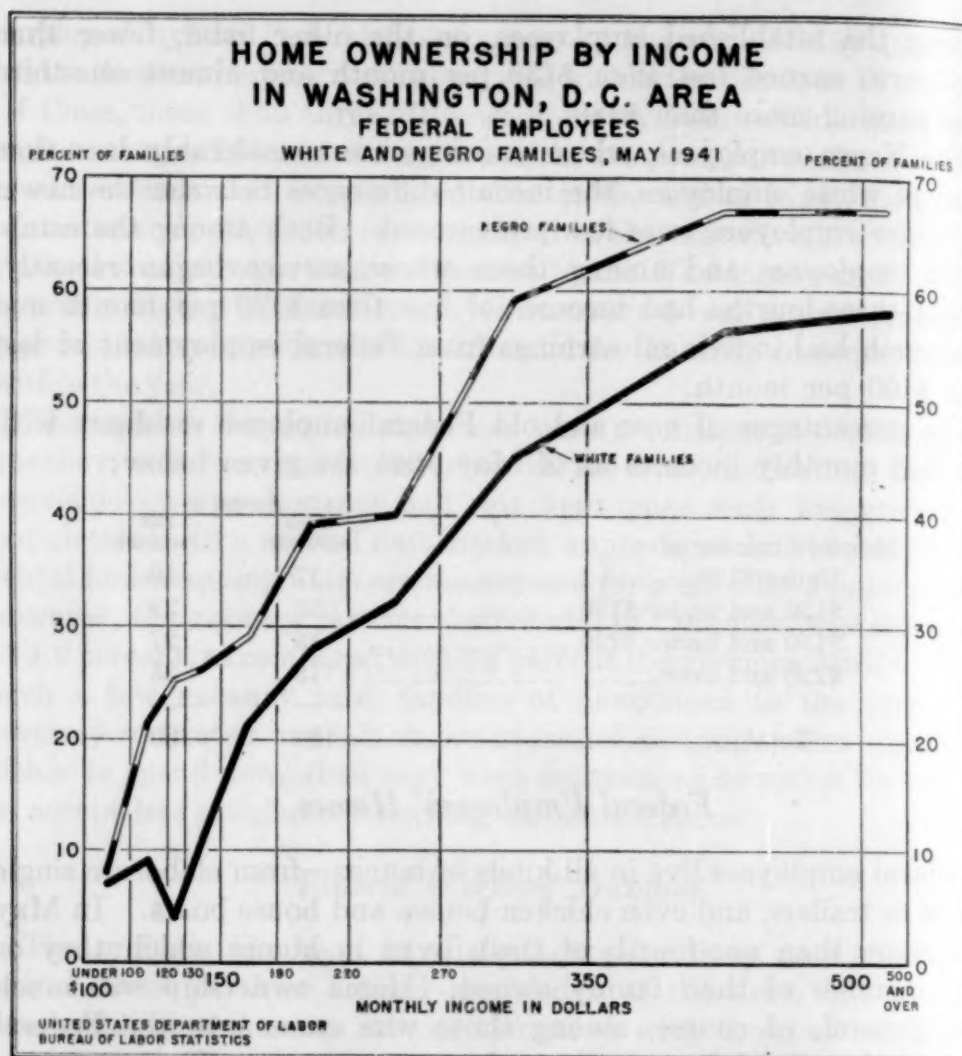
The percentages of new and old Federal-employee residents with specified monthly incomes as of May 1941 are given below:

Monthly income of—	Percent of—	
	New residents	Old residents
Under \$120-----	17	10
\$120 and under \$150-----	53	28
\$150 and under \$220-----	15	27
\$220 and over-----	15	35
Total-----	100	100

### *Federal Employees' Homes*

Federal employees live in all kinds of homes—from elaborate single houses to trailers, and even chicken houses and house boats. In May 1941 more than one-fourth of them lived in homes which they or some member of their family owned. Home ownership was much more general, of course, among those who came into the Federal service before the defense activities began to expand. The proportion of owners also varied with family income, with about 1 home owner in 12 among those with incomes of less than \$150 for May 1941, as contrasted with more than half among groups receiving \$350 or more. The proportion of home owners among the Negro families was almost as great as among white families, and for the corresponding income groups the relative frequency of home ownership was considerably greater for colored than for whites. One-sixth of the families of Negro Federal employees with incomes of less than \$150 in May 1941, and nearly one-half of those receiving \$220 and over, were home owners (chart, p. 1228).

Thus, the extent of the rental demand from Federal workers' families is indicated by the fact that in May 1941 rented quarters of some kind were occupied by three-fourths of all Government workers in the Washington area and by 97 percent of the newcomers.



The percent of home owners among Federal employees, white and colored, having specified monthly incomes is shown in the following statement:

Monthly income of—	Percent of all families	
	White	Negro
Under \$100.....	7	8
\$100 and under \$120.....	9	21
\$120 and under \$130.....	4	25
\$130 and under \$150.....	11	26
\$150 and under \$180.....	21	29
\$180 and under \$220.....	28	39
\$220 and under \$270.....	32	40
\$270 and under \$350.....	45	59
\$350 and under \$500.....	56	67
\$500 and over.....	58	67
All families.....	27	25

Of the Federal employees occupying rented quarters, 64 percent lived in houses or apartments, and 36 percent in rooms or in boarding houses. The contrast was very great between the more settled residents and the newcomers. Forty-three percent of the former lived



in houses or apartments, and only 29 percent of the latter. As many as 55 percent of the new residents were living in rooms or boarding houses, as compared with only 15 percent of the older residents. Two factors contributed to this choice of living accommodations—the newcomers are typically young and unmarried, and they have much lower incomes. Their choice is often forced upon them by the amount of rent which it is necessary to pay for homes in the Washington area.

The proportion of new- and old-resident Federal employees in the Washington area having certain types of living arrangements on May 31, 1941, is indicated below:

	Percent of—	
	Old residents	New residents
Houses and apartments, unshared:		
Owned.....	35	3
Rented.....	43	29
Rented houses and apartments, shared.....	7	13
Rooms.....	11	33
Boarding houses.....	4	22
Total.....	100	100

The influx of new Federal employees had resulted in some overcrowding in rooming and boarding houses. About one-tenth were living in a room shared with two or more other persons and an additional four-tenths had one roommate. One bathroom was shared by 8 or more persons in the case of one-sixth of the roomers, while nearly two-fifths reported at least 6 persons per bathroom. Newcomers living in rooms had considerably more crowded conditions than did older residents, with respect to both number of persons per room and the number sharing a bathroom. Similar data are not available for an earlier period, but there is little doubt that crowding has increased considerably in recent months, and that old as well as new residents have been affected. Table 1 shows the extent to which accommodations are shared by both old and new Federal-employee residents.

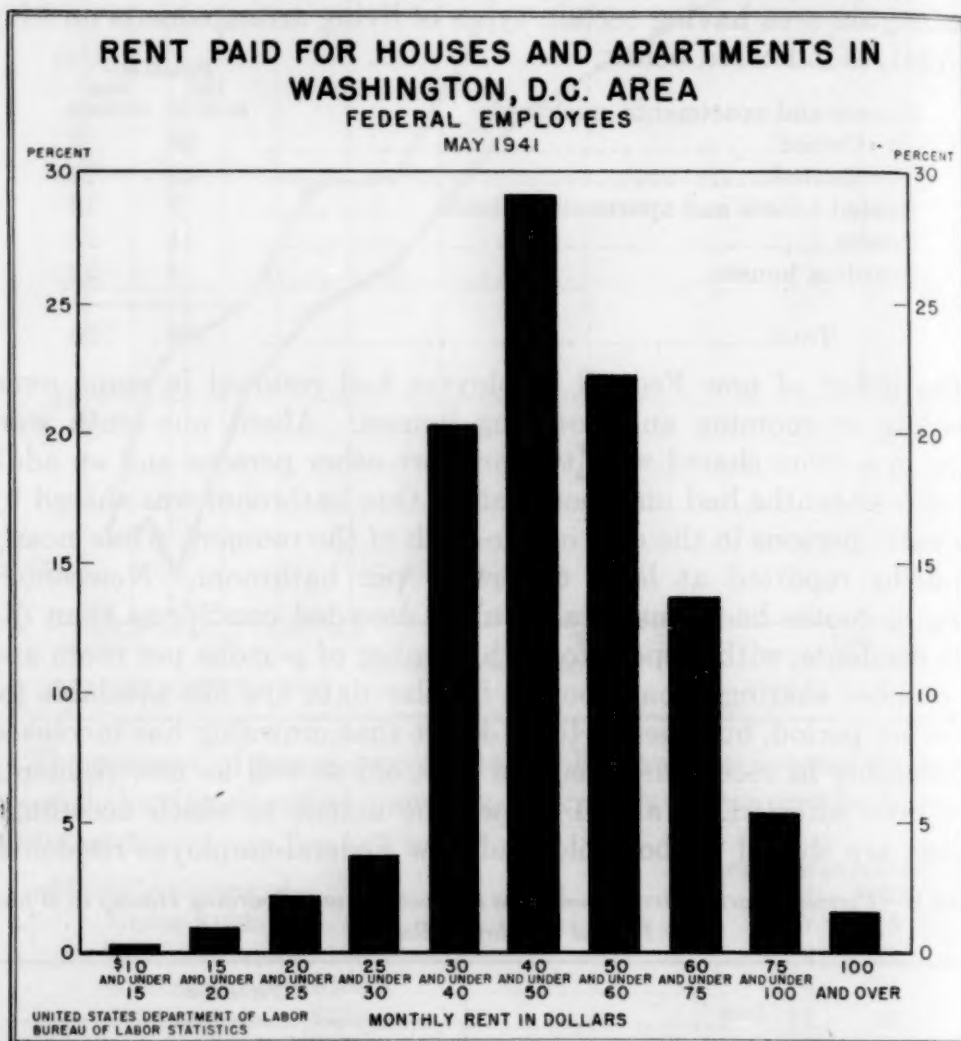
TABLE 1.—Persons Sharing Accommodations in Rooming and Boarding Houses in Which Federal Employees Resided

Item	Percent of—		
	Total persons	New residents <sup>1</sup>	Old residents <sup>1</sup>
Number sharing room:			
1 person.....	52	42	63
2 persons.....	37	44	30
3 or more persons.....	11	14	7
Total.....	100	100	100
Number sharing bathroom:			
1 person.....	6	3	10
2-3 persons.....	24	22	26
4-5 persons.....	32	33	31
6-7 persons.....	21	22	19
8-9 persons.....	10	12	7
10 or more persons.....	7	8	6
Total.....	100	100	100

<sup>1</sup> New residents, since March 31, 1940; old residents, prior to that date.

### Washington Rent Level

Even before the recent increase in Federal employment began, the Washington area had one of the highest rent levels of any large city in the country. In 1930 the Census showed that only 4 of the 93 cities with populations in excess of 100,000 had average rents higher than those in Washington. These four cities were all in metropolitan areas with populations well in excess of 1,000,000.<sup>4</sup> At that time the



median rent for urban homes in all parts of the country, was \$33, as compared with \$44 in the District of Columbia. The difference was even more striking several years later, as indicated by the real-property inventories that were made in some 200 urban communities in 1934-36,<sup>5</sup> and by a study of comparative living costs in 59 cities made by the Works Progress Administration in 1935.<sup>6</sup> Rents in Washington did not decline to the same extent during the depression as in

<sup>4</sup> U. S. Bureau of the Census. Census of Population, vol. VI, p. 61.

<sup>5</sup> Works Progress Administration. Division of Social Research. Urban Housing: A summary of real property inventories conducted as work projects.

<sup>6</sup> Idem, Intercity Differences in Costs of Living, 59 Cities, March 1935. (Research Monograph XII.)

industrial cities; consequently, high rent charges have continued up to the present time.

This is reflected in rents paid by Federal employees. For houses and apartments the rent paid in May 1941 was typically \$40 to \$60 a month, an exceptionally high level for a city the size of Washington. Almost 45 percent of the families of Federal workers, living in rented houses and apartments that were not shared with other families, were paying \$50 or more for rent in May 1941. The scarcity of inexpensive houses or apartments is indicated by the fact that only 7 percent of Federal workers were paying less than \$30 a month. In other large cities property renting at such rates is much more generally available. Thus, in 1934-36, when rents were about 10 percent lower in large cities than at present, 60 percent of all occupied rented dwellings in over 200 cities covered by the real property inventories, were renting for less than \$30.<sup>5</sup>

Thus, new Federal employees coming into the Washington area from other cities, and particularly from small towns, found it necessary to pay considerably more rent than they were accustomed to pay at home. Almost 80 percent of the new residents who had the same general type of living arrangements in the Washington area as at home reported paying higher rents in the Capital. More than one-half were paying an additional \$10 or more per month. The average net increase in rent for all newcomers was \$11. The comparatively high rent paid by the new residents was the principal source of their complaints. The situation was particularly difficult for those who brought their families with them, and who had considerable difficulty in finding moderately priced houses and apartments. A typical comment was:

Prior to October 1940 I lived in ———, W. Va. I rented a fine 6-room house for \$30 while there. My income was \$1,860 a year or \$149.57 a month after deducting retirement. The utilities never amounted to more than \$7 or \$8 a month at the most. Up here my rent alone is \$47. I am not able to rent a decent house and give my children the home they deserve. I have to make a home for my mother-in-law also, and we are crowded into five rooms for which I pay an exorbitant price and have little privacy.

I came up here for an increase to \$2,000 but as I have to pay it all out in rent, it means nothing to me.

That this case is not unusual is indicated by the fact that of the families of new residents whose monthly incomes were below \$120, or \$1,440 a year, not quite one-fifth had found houses or apartments for less than \$30. Older residents had fared somewhat better, as nearly two-fifths of those in the same income group had homes that rented for less than \$30 (table 2).

<sup>5</sup> Works Progress Administration. Division of Social Research. *Urban Housing: A summary of real property inventories conducted as work projects.*



**TABLE 2.—Percentage Distribution of New and Old Federal-Employee Residents of Unshared Houses and Apartments, by Family Income and Rent Paid, May 31, 1941<sup>1</sup>**

Rent	Percent with monthly income of—									
	Under \$120		\$120 and under \$150		\$150 and under \$180		\$180 and under \$220		\$220 and over	
	Old residents	New residents	Old residents	New residents	Old residents	New residents	Old residents	New residents	Old residents	New residents
Under \$15.....	1	0	0	0	1	0	1	0	0	0
\$15 and under \$30.....	38	19	13	8	4	3	6	1	2	1
\$30 and under \$40.....	41	42	34	39	26	18	21	24	9	9
\$40 and under \$50.....	18	33	32	39	39	46	35	27	26	18
\$50 and under \$60.....	2	6	16	9	19	24	26	27	29	22
\$60 and over.....	( <sup>2</sup> )	0	5	5	11	8	11	20	34	50
Total.....	100	100	100	100	100	100	100	100	100	100

<sup>1</sup> New residents, since March 31, 1940; old residents, prior to that time.<sup>2</sup> Less than 1 percent.

In order to economize on rent, a considerable number of Federal employees share their housekeeping quarters with others (see table 3). The effective reduction in rent by this means is illustrated by the fact that three-fourths of this group paid less than \$30 a month for rent. In cases where families doubled up, this economy was undoubtedly at the expense of space and privacy, although such an arrangement is preferred by many single individuals for whom the alternative is to live in rooms or in boarding houses. Housekeeping quarters were shared by many Federal employees at a cost not greatly in excess of that for single rooms. This type of arrangement is much more common among old than among new residents.

**TABLE 3.—Percentage Distribution of Federal Employees According to Monthly Rent Paid and Type of Living Arrangements**

Rent	Percent of total living in—			
	Houses and apartments	Shared house-keeping quarters	Rooms	Boarding houses (with room)
Under \$10.....		( <sup>1</sup> )	1	
\$10 and under \$15.....	( <sup>1</sup> )	5	12	( <sup>1</sup> )
\$15 and under \$20.....	1	21	37	( <sup>1</sup> )
\$20 and under \$25.....	2	28	27	1
\$25 and under \$30.....	4	22	12	3
\$30 and under \$40.....	20	17	9	43
\$40 and under \$50.....	29	4	2	45
\$50 and under \$60.....	23	2	( <sup>1</sup> )	6
\$60 and under \$75.....	14	1	( <sup>1</sup> )	2
\$75 and under \$100.....	5	( <sup>1</sup> )		( <sup>1</sup> )
\$100 and over.....	2			
Total.....	100	100	100	100

<sup>1</sup> Less than one-half of 1 percent.

For the 17 percent of Federal employees who were living in rooms without board, a substantial majority reported rents ranging from \$15

to \$25 a month. About 60 percent of the white roomers reported rents for May 1941 that fell within this range, and only 13 percent were paying more than \$30. Negro employees living in rooms paid somewhat less than did white roomers. Persons who were living in boarding houses and paying for room and board together typically paid \$40 a month for room and 2 meals per day.

### *Rent in Relation to Income*

High rents put considerable strain on the budgets of families with restricted incomes, and it is for this reason that the amount of rent, rather than increases in rents, was the principal cause of complaints by Federal workers about the housing situation in the Washington area up to the spring of 1941. This appears concretely in the high proportion of incomes of Federal employees with moderate salaries which was spent for rent. In large American cities 20 percent of income spent for rent is usual for white families with moderate incomes (see table 4). In Washington, Federal employees with family incomes of this size were spending nearly one-third of their income for rent. Nearly one-fifth of all families living in houses and apartments that had less than \$1,500 to cover all of their family living expenditures were paying more than 40 percent of that income for rent, and at all but the highest income level some families were spending more than this proportion. Although Negro families spent a somewhat smaller share for rent than families of white workers employed by the Federal Government, 25 percent or more of their income went for that purpose when income was below \$150 a month.

TABLE 4.—Percent of Income Paid for Rent<sup>1</sup> by Families in Selected Large Cities

City	Date	Income group	
		\$1,200-\$1,500	\$1,500-\$1,800
Washington, Federal employees.....	May 1941..	33	30
Wage earners and clerical workers: <sup>2</sup>			
Baltimore.....	1935-36.....	20	17
Philadelphia.....	1934-35.....	21	18
Boston.....	1934-35.....	23	21
Detroit.....	1934-35.....	19	17
Los Angeles.....	1934-35.....	18	18
All occupational groups: <sup>3</sup>			
New York.....	1935-36.....	30	25
Chicago.....	1935-36.....	26	23
Providence.....	1935-36.....	22	19
Columbus.....	1935-36.....	21	18
Atlanta.....	1935-36.....	18	17
Omaha.....	1935-36.....	22	20
Denver.....	1935-36.....	22	19
Portland, Oreg.....	1935-36.....	18	16

<sup>1</sup> For houses and apartments only.

<sup>2</sup> Nonrelief white families of all types and racial origins, U. S. Bureau of Labor Statistics Bulletins Nos. 636-641.

<sup>3</sup> Nonrelief native white families including husband and wife, U. S. Bureau of Labor Statistics Bulletins Nos. 642-647 and 649.

Even in the higher income groups Federal employees in Washington are using a comparatively larger share of their income for rent than families with incomes of the same size in other large cities, except possibly New York City. High-income families generally devote 10 percent of their income to rent in other large cities, as compared with 15 percent in the Washington area.

The following statement shows the percent of Federal employees' income paid for rent, by white and Negro families in each family-income group:

Monthly income of—	Percent of income paid by—	
	White families	Negro families
Under \$100.....	36	31
\$100 and under \$120.....	33	36
\$120 and under \$130.....	33	32
\$130 and under \$150.....	30	27
\$150 and under \$180.....	28	23
\$180 and under \$220.....	23	18
\$220 and under \$270.....	20	18
\$270 and under \$350.....	18	17
\$350 and under \$500.....	16	16
\$500 and over.....	15	--

#### RENT INCREASES

Rents in the Washington area remained fairly stable between April 1940 and May 1941. For houses and apartments increases were very infrequent. Among the Federal employees living in such quarters, who maintained the same residence throughout the period, only 4 percent reported higher rents, although 1 percent had advances of \$10 or more. Employees living in rooms or in boarding houses were somewhat more affected by the influx of new Government workers, with 13 percent of the boarders and 8 percent of the roomers paying more in May 1941 than in April 1940 for the same quarters (table 5).

Among families that had been in the Washington area for more than 1 year but had moved during the period, about half chose higher-priced quarters, the majority reporting advances of \$10 or more. Most of those considered their new quarters equally satisfactory or more satisfactory than those they had left.

TABLE 5.—Percent of Federal-Employee Families, Occupying Same Quarters on April 1, 1940, and May 31, 1941, Having Rent Changes, by Type of Living Arrangements

Changes in rent	Percent of families, by type of living arrangements				
	All families	Houses unshared	Apartments shared	Rooms	Boarding houses
No change.....	93	94	91	91	85
Increases of—					
Less than \$5.....	3	2	3	6	9
\$5 and less than \$10.....	2	1	3	2	4
\$10 or more.....	(1)	1	(1)	(1)	0
Decreases.....	2	2	3	1	2

<sup>1</sup> Less than a half of 1 percent.

### Where Federal Employees Live in Washington Area

Three-fourths of the families surveyed were living in the District of Columbia on May 31, 1941, and the remaining one-fourth in nearby Maryland and Virginia (table 6). Among the Negroes, 93 percent lived inside the District. Over 90 percent of all employees living in rooms or in boarding houses, and an equal proportion of those sharing housekeeping quarters with others, were living inside the District. A much smaller proportion, 78 percent, of those in houses and apartments were in the District, and 22 percent were in outlying areas. The tendency for home owners to live in suburban areas is apparent in the fact that only a little over half of the owned homes occupied by Federal employees included in the survey were in the District. Fewer than one-fifth of the families of Federal employees living in the District of Columbia were home owners, as compared with more than two-fifths in Arlington County, Va., and two-thirds in Montgomery County, Md.

TABLE 6.—Location of Residence of Federal Employees in Washington Area, by Living Arrangements

Area	Percentage distribution				
	All families	Home owners	Renters		Room or room and board
			Houses and apartments		
			Unshared	Shared	
District of Columbia.....	78	53	78	93	93
Northwest.....	57	32	53	79	78
Northeast.....	11	13	13	8	8
Southwest.....	2	1	2	1	2
Southeast.....	8	7	10	5	5
Alexandria.....	2	3	3	1	2
Arlington County.....	7	11	9	3	2
Fairfax County.....	2	5	1	(1)	(1)
Montgomery County.....	5	14	4	1	2
Prince Georges County.....	4	10	4	1	1
Other.....	2	4	1	1	(1)
All areas.....	100	100	100	100	100
Percent of all families.....	100	27	38	9	26

<sup>1</sup> Less than a half of 1 percent.

Among the Federal employees living within the District, about 75 percent were in the northwest section, which is nearest to Government offices. Among home owners, only 60 percent lived in this section. Home ownership was most frequent in the northeast, where almost 30 percent of the families of Federal employees were owners. Negro employees were less concentrated in the northwest than were the whites, only about 60 percent reporting residence in that section. Most of the remainder lived in the northeast (table 7).



Employees living in Montgomery County, Md., were paying considerably higher rents than those living elsewhere. The median rent paid for houses and apartments in Montgomery County was \$55, as compared with about \$48 in the District of Columbia. A part of this difference is undoubtedly explained by the great preponderance of one-family detached houses in Montgomery County. Within the city of Washington, Federal employees living in the northwest were paying higher rents than were those in other sections. The median rent paid for houses and apartments was \$51 in the northwest and \$31 in the southwest.

TABLE 7.—*Location of Residence of Federal Employees in the Washington Area, by Race*

Area	Percentage distribution		
	All families	White families	Negro families
District of Columbia.....	78	75	93
Northwest.....	57	56	56
Northeast.....	11	10	22
Southwest.....	2	1	8
Southeast.....	8	8	7
Alexandria.....	2	2	1
Arlington County.....	7	8	2
Fairfax County.....	2	2	2
Montgomery County.....	5	6	(1)
Prince Georges County.....	4	5	1
Other.....	2	2	(1)
All areas.....	100	100	100
Percent of all families.....	100	92	8

<sup>1</sup> Less than a half of 1 percent.

### *Navy Yard Employees*

Employees at the Navy Yard comprised the largest group surveyed from any single Government agency and formed almost 10 percent of the total. For this reason, and because of the rather distinctive occupational characteristics of this group, certain data from the survey were tabulated separately for Navy Yard employees.

The income of families in which the chief earner was a Navy Yard employee averaged somewhat higher than that of other Federal-employee families included in the survey. Only about 20 percent of the Navy Yard families had incomes for May 1941 of less than \$150, as compared with 40 percent for all employees. At least part of the difference in income between the two groups is explained by the frequency of paid overtime in the Navy Yard during May 1941. Unlike the workers in the other Government agencies, those whose service began after March 31, 1940, had incomes approximately as high as employees on the pay roll prior to that date.

A comparison of the monthly income of families of Navy Yard employees with that of all Federal workers included in the survey is given in the following percentage distribution.

Monthly income of—	All families	Families of Navy Yard workers
Less than \$120.....percent..	10	10
\$120 and less than \$150.....do....	29	9
\$150 and less than \$180.....do....	14	18
\$180 and less than \$220.....do....	9	21
\$220 and less than \$270.....do....	12	23
\$270 and over.....do....	26	19
Total.....do....	100	100

The living arrangements of families of Navy Yard employees differed in several respects from those of other families. Home ownership was considerably more frequent among this group—34 percent for Navy Yard employees, as compared with 27 percent for all families. The proportion of renters living in rooms or boarding houses was considerably less among Navy Yard employees—26 percent, as compared with 36 percent for all employees. Even among workers whose service with the Navy Yard began after March 31, 1940, fewer than 30 percent were in rooms, although among new residents as a whole nearly half were so domiciled.

Navy Yard employees paid less rent than did workers in other Government agencies, in spite of the fact that their incomes averaged somewhat higher. The median monthly rent for families living in houses and apartments was about \$43, and only 27 percent paid \$50 or more, as compared with 44 percent for all families. Those living in rented rooms likewise paid somewhat lower rates than did other Federal workers, the difference in median room rent amounting to about \$1. For those living in shared housekeeping quarters similar differences were reported. Navy Yard workers paying for board and room together reported an average outlay of nearly \$3 less than that paid by roomers and boarders in all agencies considered together. Since Navy Yard employees had higher average incomes than did workers in other agencies, their smaller rents gave them a substantially greater margin of income after rents were paid than was available to other Federal employees in Washington. At each income level they spent approximately 2 percent less of their income on rent than did all employees. These findings support data obtained from the Study of Consumer Purchases,<sup>7</sup> which showed that there is a rather consistent tendency for wage-earning families to spend less for housing than do other occupational groups at the same income level.

<sup>7</sup> U. S. Bureau of Labor Statistics Bulletin No. 648: Family Expenditure in Selected Cities, 1935-36, Vol. I—Housing.

## COST OF LIVING IN LARGE CITIES, SEPTEMBER 15, 1941

LIVING costs to moderate-income families were 9.6 percent higher in September 1941 than in August 1939, the month before the outbreak of the war in Europe. There was an advance of 3.3 percent between mid-June and mid-September 1941 of which 1.8 percent occurred between mid-August and mid-September. Clothing costs rose more than 7 percent, housefurnishings more than 6 percent, and food nearly 5 percent over the 3-month period.

Increases were particularly striking in all the Southern cities, where the presence of the Army camps and increased pay rolls in industrial plants greatly increased demand for consumer goods and services. In addition, advances of more than 4 percent over the quarter were reported from Chicago, Cleveland, Manchester, and Portland, Oreg.

The index on September 15, 1941, was 108.1 percent of the average in 1935-39 but 12 percent below the December 1929 level.

*Food.*—An important factor in the sharp rise in cost of living between August and September was higher food costs, which rose 2.6 percent. On September 15, 1941, they were 12.6 percent higher than in March, when the rapid rise in food prices began. Bread, meat, milk, sugar, coffee, and canned goods were all quoted at higher prices in mid-September than a month earlier. Food prices increased at a slower rate than in recent months, according to a preliminary report based on a check of 18 important foods in 18 cities. Although many foods were higher, prices of pork chops, in particular, were lower on October 14 in accordance with the usual seasonal movement.

*Clothing.*—With the introduction of new lines of fall clothing in September, prices at retail advanced very sharply. On the average, clothing costs in the large cities were 7.3 percent higher in September than in June, following gradual increases in earlier periods. Half of this increase came in the last month when the increase was 3.6 percent. Many articles such as men's suits, cotton work clothing and work shoes, and women's percale wash frocks, on which price rises have been reported throughout the last year, continued to advance. Prices of men's overcoats and underwear, women's wool coats, silk and rayon underwear, and silk hose were also considerably higher.

*Housefurnishings.*—Housefurnishings costs rose 6.4 percent between mid-June and mid-September. An increase of 2.8 percent occurred between mid-August and mid-September. Prices of cotton towels and sheets, wool rugs, suites of furniture, and electrical appliances continued the upward movement reported since the first of this year. Price rises were also reported for curtains, wool blankets, and stoves.

*Rent.*—Between June 15 and September 15, the total rental bill paid by moderate-income families advanced 0.9 percent, taking into



consideration those rents which changed and those which remained unchanged. In most cities, relatively few changes were reported since comparatively few leases expire until October 1. In cities in which the vacancy situation has become particularly acute as a result of increased employment in defense industries, the average increase in rents was relatively large. This is particularly true in Detroit, Seattle, Buffalo, Cleveland, Baltimore, and Birmingham. The average increase was a little over \$2.50 per month to those families in the 34 large cities whose rents were raised.

*Fuel, electricity, and ice.*—As usual at this time of year, average prices of fuel oil, wood, and coal rose substantially over the quarter.

*Miscellaneous goods and services.*—On the average in the large cities, miscellaneous living costs increased 1.6 percent in the 3 months from June 15 to September 15. Prices of automobiles, tires, tubes, and gasoline advanced substantially throughout the country.

TABLE 1.—Percent of Change from June 15 to September 15, 1941, in Cost of Goods Purchased by Wage Earners and Lower-Salaried Workers, by Groups of Items

Area and city	All items	Food	Clothing	Rent	Fuel, electricity and ice	House-furnishings	Miscellaneous
Average: large cities.....	+3.3	<sup>1</sup> +4.6	+7.3	+0.9	+2.3	+6.4	+1.6
New England:							
Boston.....	+3.8	+5.7	+7.1	+8	+3.1	+8.2	+1.6
Manchester.....	+4.3	+5.5	+8.1	+8	+4.4	+7.5	+1.8
Portland, Maine.....	+3.3	+4.8	+6.7	+5	+2.4	+6.1	+1.6
Middle Atlantic:							
Buffalo.....	+3.4	+3.6	+7.5	+2.5	+2.6	+6.6	+1.9
New York.....	+2.2	+2.9	+6.4	+1	+7	+6.8	+1.1
Philadelphia.....	+3.3	+4.1	+7.0	+8	+2.6	+6.6	+1.9
Pittsburgh.....	+3.3	+4.5	+8.6	+2	+2.5	+7.3	+1.8
Scranton.....	+3.8	+4.8	+7.4	+1	+2.9	+6.3	+2.5
East North Central:							
Chicago.....	+4.6	+8.0	+7.0	+6	+2.2	+3.9	+2.6
Cincinnati.....	+4.0	+5.0	+8.4	+2	+4.1	+10.6	+1.8
Cleveland.....	+4.4	+5.8	+11.1	+2.5	+2.6	+6.2	+1.5
Detroit.....	+3.0	+1.8	+7.3	+3.1	+2.8	+5.3	+2.5
Indianapolis.....	+3.9	+4.5	+9.1	+1.6	+3.0	+6.7	+2.1
Milwaukee.....	+3.1	+2.5	+8.7	+1.9	+1.9	+7.9	+1.6
West North Central:							
Kansas City.....	+3.5	+5.9	+5.9	+1.3	+1.7	+3.9	+1.9
Minneapolis.....	+3.2	+4.3	+7.8	+3	+2.7	+5.9	+1.9
St. Louis.....	+3.6	+6.8	+6.0	+7	+3.2	+5.5	( <sup>2</sup> )
South Atlantic:							
Atlanta.....	+4.2	+6.4	+9.0	+3	+5.1	+6.3	+1.7
Baltimore.....	+3.4	+4.0	+5.5	+2.3	+3.5	+8.9	+1.4
Jacksonville.....	+4.2	+6.5	+7.4	+1.3	+8.9	+5.2	+1.4
Norfolk Area.....	+4.2	+5.7	+8.7	+1.8	+2.1	+8.0	+2.0
Richmond.....	+4.3	+6.8	+8.4	+4	+3.4	+7.2	+1.9
Savannah.....	+5.2	+6.9	+10.3	+1.7	+3.8	+5.9	+3.1
Washington, D. C.....	+3.4	+5.4	+8.5	+6	+2.1	+5.7	+1.6
East South Central:							
Birmingham.....	+4.2	+5.8	+8.7	+2.3	+2.5	+6.9	+1.6
Memphis.....	+4.6	+7.1	+8.8	+1.7	+5.2	+8.4	+1.2
Mobile.....	+5.2	+8.6	+10.2	+1.3	+3.1	+5.6	+2.0
West South Central:							
Houston.....	+3.8	+6.3	+8.3	( <sup>2</sup> )	+4	+4.8	+1.8
New Orleans.....	+5.0	+8.1	+9.7	+4	+1	+6.2	+1.7
Mountain: Denver.....	+3.0	+4.3	+7.5	+5	( <sup>2</sup> )	+3.7	+2.1
Pacific:							
Los Angeles.....	+2.4	+3.9	+5.6	( <sup>2</sup> )	( <sup>2</sup> )	+5.1	+9
Portland, Oreg.....	+4.5	+8.8	+6.0	+1.6	+3.0	+3.5	+1.2
San Francisco.....	+2.3	+3.7	+4.1	+5	+2	+5.5	+1.0
Seattle.....	+4.0	+6.7	+5.3	+3.0	+1.8	+6.8	+1.4

<sup>1</sup> Based on data for 51 cities.

<sup>2</sup> No change.



TABLE 2.—Indexes of Cost of Goods Purchased by Wage Earners and Lower-Salaried Workers, by Groups of Items, July 15 Through September 15, 1941

[Average 1935-39=100. Indexes for July and August revised]

City and date	All items	Food	Clothing	Rent	Fuel, electricity and ice	House-furnishings	Miscellaneous
<b>Average, large cities:</b>							
July 15.....	105.3	106.7	104.8	106.1	102.3	107.4	103.7
Aug. 15.....	106.2	108.0	106.9	106.3	103.2	108.9	104.0
Sept. 15.....	108.1	110.8	110.8	106.8	103.7	112.0	105.0
<b>Atlanta:</b>							
July 15.....	(1)	105.2	(1)	(1)	102.2	(1)	(1)
Aug. 15.....	(1)	107.0	(1)	(1)	104.3	(1)	(1)
Sept. 15.....	107.6	110.0	114.1	105.1	105.3	110.6	104.3
<b>Baltimore:</b>							
July 15.....	106.4	108.5	104.8	109.0	101.8	108.1	103.2
Aug. 15.....	107.4	109.6	106.7	109.6	103.4	110.6	103.5
Sept. 15.....	109.5	113.1	109.2	110.9	103.4	115.5	104.2
<b>Birmingham:</b>							
July 15.....	107.0	105.2	107.7	120.6	96.4	105.8	104.2
Aug. 15.....	108.2	106.8	110.5	121.4	97.5	107.5	104.7
Sept. 15.....	109.9	109.0	114.7	122.1	97.9	110.5	105.5
<b>Boston:</b>							
July 15.....	103.8	104.7	104.1	101.0	108.0	105.3	102.9
Aug. 15.....	105.2	107.3	105.5	101.2	109.2	106.6	103.2
Sept. 15.....	106.4	108.4	110.0	101.6	110.1	111.1	103.9
<b>Buffalo:</b>							
July 15.....	108.0	110.8	104.5	110.6	101.2	109.9	106.0
Aug. 15.....	108.7	111.8	106.0	110.6	101.9	111.2	106.2
Sept. 15.....	110.9	114.1	110.8	112.7	102.4	114.6	107.7
<b>Chicago:</b>							
July 15.....	106.1	107.5	101.7	110.5	101.6	106.4	103.4
Aug. 15.....	106.8	108.1	104.5	110.7	102.5	108.4	103.6
Sept. 15.....	109.6	114.3	108.5	111.0	102.6	110.1	104.2
<b>Cincinnati:</b>							
July 15.....	104.5	104.8	106.2	103.0	102.4	110.6	103.5
Aug. 15.....	106.4	109.0	107.7	103.0	103.7	111.6	103.9
Sept. 15.....	108.1	110.0	113.4	103.0	103.9	118.7	105.2
<b>Cleveland:</b>							
July 15.....	107.1	108.7	106.2	110.2	110.6	110.8	102.4
Aug. 15.....	109.0	112.1	110.1	110.8	111.8	112.5	102.8
Sept. 15.....	110.9	114.1	114.3	112.9	112.0	115.3	103.8
<b>Denver:</b>							
July 15.....	103.9	104.2	101.7	106.7	97.4	107.9	103.5
Aug. 15.....	104.9	106.0	104.4	106.9	97.4	108.8	103.9
Sept. 15.....	106.0	107.4	108.1	107.1	97.4	109.9	104.5
<b>Detroit:</b>							
July 15.....	107.1	107.2	105.2	112.1	102.5	108.9	105.1
Aug. 15.....	107.5	107.1	106.5	112.4	104.2	110.3	105.2
Sept. 15.....	109.6	108.9	110.7	114.7	104.8	112.0	107.2
<b>Houston:</b>							
July 15.....	105.0	108.7	105.5	106.9	93.1	111.2	101.4
Aug. 15.....	105.8	109.5	108.7	106.9	93.2	112.7	101.8
Sept. 15.....	107.9	113.1	112.5	106.9	93.5	114.3	103.1
<b>Indianapolis:</b>							
July 15.....	(1)	105.9	(1)	(1)	101.3	(1)	(1)
Aug. 15.....	(1)	108.5	(1)	(1)	102.4	(1)	(1)
Sept. 15.....	109.7	111.3	113.2	116.0	103.0	115.1	104.4
<b>Jacksonville:</b>							
July 15.....	(1)	111.4	(1)	(1)	98.5	(1)	(1)
Aug. 15.....	(1)	113.6	(1)	(1)	98.7	(1)	(1)
Sept. 15.....	110.6	114.6	110.5	113.1	106.8	109.5	106.5
<b>Kansas City:</b>							
July 15.....	102.2	101.2	104.4	104.1	101.2	105.1	101.3
Aug. 15.....	103.2	101.8	107.1	104.6	102.6	106.0	102.3
Sept. 15.....	105.4	107.3	109.6	104.6	102.7	107.2	103.0
<b>Los Angeles:</b>							
July 15.....	105.7	107.2	106.8	106.6	94.2	106.9	104.7
Aug. 15.....	106.6	109.3	108.4	106.6	94.2	108.3	104.7
Sept. 15.....	108.1	111.9	111.6	106.6	94.2	110.5	105.4
<b>Manchester:</b>							
July 15.....	(1)	107.1	(1)	(1)	105.7	(1)	(1)
Aug. 15.....	(1)	108.4	(1)	(1)	107.7	(1)	(1)
Sept. 15.....	108.9	110.4	110.0	104.9	110.2	109.5	107.4
<b>Memphis:</b>							
July 15.....	(1)	105.7	(1)	(1)	95.4	(1)	(1)
Aug. 15.....	(1)	106.4	(1)	(1)	95.8	(1)	(1)
Sept. 15.....	108.3	110.6	112.6	111.6	99.6	114.1	103.5
<b>Milwaukee:</b>							
July 15.....	(1)	106.8	(1)	(1)	100.8	(1)	(1)
Aug. 15.....	(1)	107.1	(1)	(1)	102.5	(1)	(1)
Sept. 15.....	106.8	109.2	108.6	105.1	102.5	114.0	104.0

1 Monthly data not available.

TABLE 2.—Indexes of Cost of Goods Purchased by Wage Earners and Lower-Salaried Workers, by Groups of Items, July 15 Through September 15, 1941—Continued

City and date	All items	Food	Clothing	Rent	Fuel, electricity and ice	House-furnishings	Miscellaneous
<b>Minneapolis:</b>							
July 15.....	106.3	108.2	105.1	108.4	97.2	109.2	105.6
Aug. 15.....	107.3	110.0	106.7	108.6	98.2	110.7	106.0
Sept. 15.....	109.0	112.0	111.6	108.6	98.6	114.3	107.3
<b>Mobile:</b>							
July 15.....	(1)	110.4	(1)	(1)	96.3	(1)	(1)
Aug. 15.....	(1)	112.3	(1)	(1)	97.0	(1)	(1)
Sept. 15.....	110.6	115.8	112.8	114.3	99.3	111.4	105.1
<b>New Orleans:</b>							
July 15.....	(1)	112.0	(1)	(1)	98.8	(1)	(1)
Aug. 15.....	(1)	114.7	(1)	(1)	98.8	(1)	(1)
Sept. 15.....	110.9	117.4	114.4	104.7	98.9	117.0	105.3
<b>New York:</b>							
July 15.....	104.8	107.0	104.6	102.7	103.4	102.7	104.0
Aug. 15.....	105.5	107.8	106.3	102.8	103.8	103.8	104.4
Sept. 15.....	106.8	109.8	109.7	102.9	104.1	106.9	105.0
<b>Norfolk:</b>							
July 15.....	(1)	108.4	(1)	(1)	108.8	(1)	(1)
Aug. 15.....	(1)	110.8	(1)	(1)	111.0	(1)	(1)
Sept. 15.....	110.9	113.1	114.5	111.6	111.1	113.1	106.0
<b>Philadelphia:</b>							
July 15.....	103.7	103.3	104.4	104.7	101.5	107.2	103.2
Aug. 15.....	104.7	104.7	106.3	105.1	103.0	108.4	103.6
Sept. 15.....	106.7	107.5	110.5	105.3	103.1	111.9	105.1
<b>Pittsburgh:</b>							
July 15.....	106.2	108.7	104.6	106.8	105.8	108.9	102.9
Aug. 15.....	106.8	109.0	107.3	106.8	105.9	111.0	103.2
Sept. 15.....	108.7	112.1	111.4	106.9	107.1	113.9	104.0
<b>Portland, Maine:</b>							
July 15.....	(1)	106.3	(1)	(1)	103.2	(1)	(1)
Aug. 15.....	(1)	107.9	(1)	(1)	104.1	(1)	(1)
Sept. 15.....	106.2	109.2	107.4	101.2	105.1	107.8	105.4
<b>Portland, Oreg.:</b>							
July 15.....	(1)	111.5	(1)	(1)	96.1	(1)	(1)
Aug. 15.....	(1)	114.3	(1)	(1)	96.8	(1)	(1)
Sept. 15.....	111.0	119.9	110.1	110.5	98.2	109.5	105.5
<b>Richmond:</b>							
July 15.....	(1)	105.1	(1)	(1)	101.2	(1)	(1)
Aug. 15.....	(1)	107.5	(1)	(1)	101.2	(1)	(1)
Sept. 15.....	107.4	109.9	113.5	103.7	103.2	117.0	104.1
<b>St. Louis:</b>							
July 15.....	104.6	108.5	105.6	101.8	103.9	102.1	101.9
Aug. 15.....	105.1	109.4	107.2	101.8	105.2	102.8	101.6
Sept. 15.....	107.8	114.5	110.5	102.4	105.8	105.3	102.9
<b>San Francisco:</b>							
July 15.....	105.7	107.2	106.3	104.0	91.6	107.2	106.2
Aug. 15.....	106.3	108.3	107.2	104.1	91.6	108.5	106.4
Sept. 15.....	107.8	111.1	109.5	104.5	91.8	111.3	107.0
<b>Savannah:</b>							
July 15.....	107.4	113.5	105.4	106.6	99.1	106.9	103.3
Aug. 15.....	108.3	114.8	107.8	106.6	99.5	108.7	103.8
Sept. 15.....	110.5	116.4	113.7	108.0	100.6	111.6	105.6
<b>Scranton:</b>							
July 15.....	(1)	106.8	(1)	(1)	97.5	(1)	(1)
Aug. 15.....	(1)	108.8	(1)	(1)	98.6	(1)	(1)
Sept. 15.....	106.7	110.3	112.7	98.4	99.5	113.6	105.1
<b>Seattle:</b>							
July 15.....	107.4	109.3	107.8	111.3	95.7	103.4	106.3
Aug. 15.....	108.7	112.2	109.1	111.4	95.8	105.7	106.7
Sept. 15.....	111.5	117.0	112.3	114.1	97.6	108.9	107.6
<b>Washington, D. C.:</b>							
July 15.....	(1)	105.7	(1)	(1)	99.9	(1)	(1)
Aug. 15.....	(1)	107.4	(1)	(1)	100.8	(1)	(1)
Sept. 15.....	106.7	110.5	113.7	100.9	101.1	117.9	104.2

1 Monthly data not available

# Wage and Hour Statistics

## UNION WAGES AND HOURS IN THE BUILDING TRADES, JUNE 1, 1941<sup>1</sup>

### *Summary*

THE average union rate per hour for all building trades was \$1.365 on June 1, 1941, in the 75 cities covered in a survey by the Bureau of Labor Statistics. The journeyman average was \$1.50, while the average for helpers and laborers was 86.8 cents. Only 1.1 percent of the journeyman members had scales of less than \$1, while 6.3 percent had rates of \$2 and over. Almost 40 percent of the helpers and laborers had rates between 70 and 90 cents, and 13.7 percent had rates of \$1.20 and over.<sup>1</sup>

Union wage rates in the building trades increased 3.7 percent over 1940. Journeymen raised their rates by 3.5 percent and helpers by 4.8 percent. Over 40 percent of the quoted scales called for raises benefiting more than 44 percent of the members.

About three-fourths of all the journeymen and two-thirds of all the helpers had normal workweeks of 40 hours. Overtime rates went into effect after 35 hours in agreements covering 15.6 percent of all building-trades unionists surveyed, while 6.2 percent were covered by agreements providing penalty rates after working 30 hours. Only 5 percent of all union members had straight-time workweeks of more than 40 hours. An increase in the workweek from less than 40 hours to the 40-hour basis, in several cities, caused the index of union hours to increase slightly over last year.

A little more than 60 percent of the union members were receiving double time for overtime; over 71 percent of the journeymen and 21 percent of the helpers and laborers operated on this basis. Practically all other overtime was paid at the rate of time and a half.

### *Scope and Method of Study*

Union scales of wages and hours in the building trades have been collected by the Bureau of Labor Statistics each year since 1907. The early studies were made in 39 cities and included 14 journeyman trades and 4 helper and laborer trades. The study has been gradually

<sup>1</sup> Prepared by Kermit B. Mohn, of the Bureau's Industrial Relations Division under the direction of Florence Peterson, chief.

extended to cover 75 cities, and now includes 28 journeyman trades and 9 helper and laborer trades. These cities are located in 40 States and the District of Columbia.<sup>2</sup>

As far as possible, the scales collected were those actually in force on June 1. The collection of the data was made by field representatives of the Bureau who visited some responsible official of each local union included in the study. Each scale was verified by the union official interviewed, and was further checked by comparison with the written agreements when copies were available. The 1941 survey included 3,321 quotations of scales covering 573,321 union members.

*Apprentices and foremen.*—A young person working in a trade for a definite number of years, for the purpose of learning the trade, and receiving instruction as an element of compensation, is considered an apprentice. Scales for apprentices have not been included, but scales for helpers in a number of trades were collected. In some trades the work of helpers is performed at least in part by apprentices. Whenever it was found that helpers' work was done largely by apprentices, the scales for such helpers were omitted.

No rates were collected for strictly supervising foremen nor for individuals who were paid unusual rates because of some personal qualification as distinct from the usual trade qualifications.

<sup>2</sup> The following are the cities covered. The numerals indicate the population group in which the city is included in tables 7 and 9.

#### North and Pacific

Baltimore, Md. II.	Newark, N. J. III.
Binghamton, N. Y. V.	New Haven, Conn. IV.
Boston, Mass. II.	New York, N. Y. I.
Buffalo, N. Y. II.	Omaha, Nebr. IV.
Butte, Mont. V.	Peoria, Ill. IV.
Charleston, W. Va. V.	Philadelphia, Pa. I.
Chicago, Ill. I.	Pittsburgh, Pa. II.
Cincinnati, Ohio. III.	Portland, Maine. V.
Cleveland, Ohio. II.	Portland, Oreg. III.
Columbus, Ohio. III.	Providence, R. I. III.
Davenport, Iowa, included in Rock Island (Ill.) district.	Reading, Pa. IV.
Dayton, Ohio. IV.	Rochester, N. Y. III.
Denver, Colo. III.	Rock Island (Ill.) district. IV.
Des Moines, Iowa. IV.	St. Louis, Mo. II.
Detroit, Mich. I.	St. Paul, Minn. III.
Duluth, Minn. IV.	Salt Lake City, Utah. IV.
Erie, Pa. IV.	San Francisco, Calif. II.
Grand Rapids, Mich. IV.	Scranton, Pa. IV.
Indianapolis, Ind. III.	Seattle, Wash. III.
Kansas City, Mo. III.	South Bend, Ind. IV.
Los Angeles, Calif. I.	Spokane, Wash. IV.
Madison, Wis. V.	Springfield, Mass. IV.
Manchester, N. H. V.	Toledo, Ohio. III.
Milwaukee, Wis. II.	Washington, D. C. II.
Minneapolis, Minn. III.	Wichita, Kans. IV.
Moline, Ill., included in Rock Island (Ill.) district.	Worcester, Mass. IV.
	York, Pa. V.
	Youngstown, Ohio. IV.

#### South and Southwest

Atlanta, Ga. III.	Memphis, Tenn. III.
Birmingham, Ala. III.	Mobile, Ala. V.
Charleston, S. C. V.	Nashville, Tenn. IV.
Charlotte, N. C. IV.	New Orleans, La. III.
Dallas, Tex. III.	Norfolk, Va. IV.
El Paso, Tex. V.	Oklahoma City, Okla. IV.
Houston, Tex. III.	Phoenix, Ariz. V.
Jackson, Miss. V.	Richmond, Va. IV.
Jacksonville, Fla. IV.	San Antonio, Tex. III.
Little Rock, Ark. V.	Tampa, Fla. IV.
Louisville, Ky. III.	



*Union scale.*—A union scale is a wage rate or schedule of hours agreed to by an employer (or group of employers) and a labor organization, for persons who are actually working or would be working if there were work to be had in that locality. A union scale usually fixes a limit in one direction, that is, it provides a minimum wage and maximum hours of work, with specific provisions for overtime.

*Union rates and prevailing rates.*—This report is concerned only with the contract scales for union members on union jobs. No attempt has been made to discover what proportions of all the workers in the different occupations were members of the unions. As union strength varies from city to city and between trades, the prevailing scale for any occupation in any one city may or may not coincide with the union scale. Where practically all the workers of a particular trade belong to the local union, the union scale will be equivalent to the prevailing scale in that community. On the other hand, where the proportion of craftsmen belonging to the union is small, the union scale may not be the actual prevailing scale.

*Averages.*—The averages for each trade given in this report are weighted according to the number of members in the various local unions. Thus the averages reflect not only the specific rates provided in the union agreements but also the number of persons presumably benefiting from these rates.

*Index numbers.*—In the series of index numbers (1929=100) the percentage change from year to year is based on aggregates computed from the quotations of the unions which furnished reports for identical occupations in both years. The membership weights in both of the aggregates used in each year-to-year comparison are those reported for the second year. The index for each year is computed by multiplying the index for the preceding year by the ratio of the aggregates so obtained. The index numbers were revised on this basis in 1936 in order to eliminate the influence of changes in union membership which obscure the real changes in wages and hours.

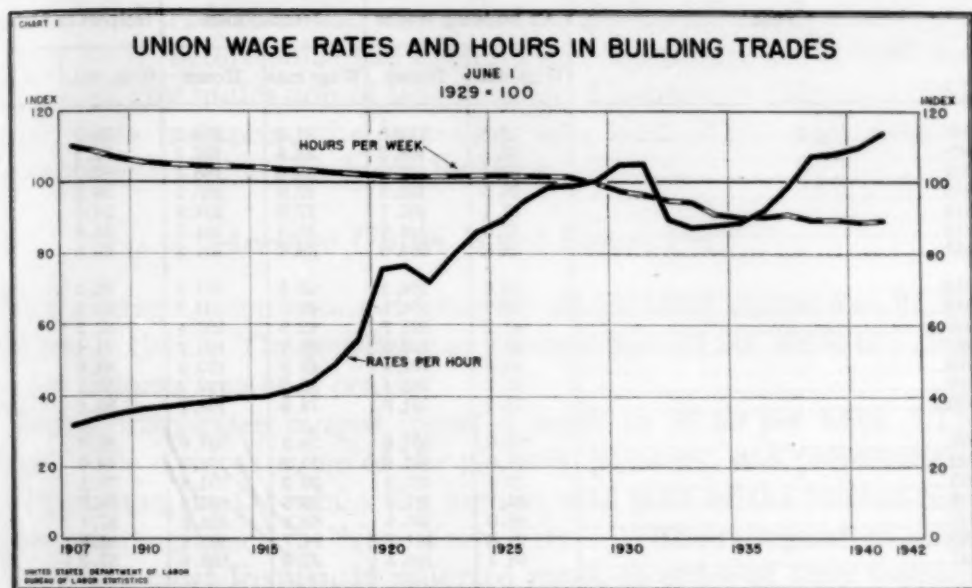
For the trend of union rates, the table of indexes should be consulted; for a comparison of wage rates between trades or cities at a given time, the table of averages should be used.

### *Trend of Union Wage Rates and Hours*

*Wage rates.*—Union wage rates in the building trades increased 3.7 percent during the period from June 1, 1940, to June 1, 1941. Journeymen's rates showed an advance of 3.5 percent and those of helpers 4.8 percent. These percentages represent the largest gains since 1937-38 and are the result of the upswing in construction activity and generally improved business conditions. (See table 1.)

The indexes of union wages and hours, based on 1929 as 100, show a gradual upward movement from 1907, the time of the initial survey, to 1917. During this 10-year period the index of all trades advanced 39 percent. During the next 3 years the increases were definitely more marked, amounting to 11, 14.6, and 35 percent respectively. In 1922 the index declined 6.3 percent, but the next year there was a 10.6 percent rise, bringing the index to 79.4. Although the gains were not so noticeable during the following years, the index continued to advance to a high point of 104.5 in 1931.

Beginning in the summer of 1931, wage rates, as indicated in the building-trades agreements, declined rapidly. Agreements in effect



in the spring of 1933 provided rates which averaged 16.9 percent less than those in effect 2 years previously, bringing the index down almost to that of 1924.

With the upturn in business, building-trades rates began to increase in 1934 and by 1937 the index was almost up to the level reached in 1927 and 1928. From 1937 to 1938 wage rates rose 8.9 percent, the index for the first time exceeding the predepression levels. Since that time the increases have been steady though small, amounting to 1.6 percent in 1940 and 3.7 percent in 1941. (See table 12 for trend by individual trades.)

The wage index for journeymen has maintained a very close relationship with the index for all building trades combined. The two indexes changed by practically the same amounts during the entire period 1907-1941. However, the index for the helper and laborer group fluctuated much more than did either of the other two. These

fluctuations became noticeable for the first time in 1917 when the helper and laborer index increased 9.8 percent over 1916, compared to rises of 5.5 percent for the journeymen and 6.3 percent for all trades combined. The fluctuations continued in a somewhat similar manner for the next three years, so that for the period from 1916 to 1920 the helper and laborer index rose 113.5 percent while the journeymen advanced by 78.3 percent and all trades combined by 82.5 percent.

TABLE 1.—Indexes of Union Hourly Wage Rates and Weekly Hours in All Building Trades, 1907 to 1941

Year	Index numbers (1929=100)					
	All building trades		Journeymen		Helpers and laborers	
	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours
1907.....	31.5	110.0	31.7	109.3	30.7	113.1
1908.....	33.5	108.3	33.8	107.7	32.1	110.8
1909.....	35.1	106.8	35.5	106.4	33.2	108.5
1910.....	36.5	105.5	37.0	105.2	34.3	106.6
1911.....	37.1	105.1	37.6	104.8	34.5	106.4
1912.....	37.9	104.8	38.5	104.5	34.8	106.1
1913.....	38.8	104.6	39.4	104.2	35.8	106.1
1914.....	39.6	104.2	40.3	103.9	36.2	105.5
1915.....	39.9	104.1	40.6	103.8	36.5	105.4
1916.....	41.2	103.7	42.0	103.4	37.7	105.1
1917.....	43.8	103.5	44.3	103.2	41.4	104.7
1918.....	48.6	102.9	49.0	102.6	48.0	104.3
1919.....	55.7	102.4	56.0	102.2	55.5	103.3
1920.....	75.2	101.9	74.9	101.7	80.5	102.7
1921.....	76.6	101.8	76.3	101.6	81.3	102.7
1922.....	71.8	101.8	71.9	101.7	74.0	102.4
1923.....	79.4	101.9	79.2	101.8	78.5	102.6
1924.....	85.7	101.9	85.6	101.8	84.9	102.6
1925.....	89.0	101.9	88.8	101.8	87.7	102.4
1926.....	94.8	101.7	94.7	101.6	95.6	102.2
1927.....	98.1	101.5	97.9	101.4	97.3	102.2
1928.....	98.7	100.9	98.7	100.7	98.3	102.1
1929.....	100.0	100.0	100.0	100.0	100.0	100.0
1930.....	104.2	97.2	104.1	97.1	105.1	97.8
1931.....	104.5	96.0	104.5	95.8	104.5	97.0
1932.....	89.3	94.3	89.3	94.1	89.2	94.8
1933.....	86.8	94.0	86.9	93.8	85.2	94.4
1934.....	87.4	90.5	87.4	90.3	87.7	91.4
1935.....	88.4	89.8	88.4	89.6	88.2	90.8
1936.....	91.6	89.8	91.3	89.6	93.4	91.0
1937.....	98.0	90.2	97.6	90.0	101.5	91.3
1938.....	106.7	88.7	106.1	88.4	111.7	89.9
1939.....	107.4	88.5	106.8	88.3	112.6	89.7
1940.....	109.1	88.4	108.3	88.3	114.8	89.2
1941.....	113.1	88.8	112.1	88.7	120.3	89.4

During the depression of 1921, helpers' and laborers' scales were reduced by 9 percent while the journeymen's loss amounted to but 5.8 percent, as indicated by the 1922 indexes. Furthermore, the recovery of the journeyman index was much more rapid, as its 1923 figure of 79.2 exceeded its predepression index of 76.3, while the helper and laborer index, although it registered an increase, did not reach its 1921 high until 1924. From 1924 to 1934 the percentage changes for



each index were practically uniform. Since 1935 the helper-laborer index has increased more rapidly than that of the journeymen, the increase amounting to 36.5 percent compared to an increase of 26.8 for journeymen. Since the beginning of the series in 1907, journeymen's wage rates have increased 254 percent, those of helpers 292 percent, and those of all building trades 259 percent.

*Maximum weekly hours.*—The index of union hours in the building trades was one-half of 1 percent higher in 1941 than in 1940, indicating a slight lengthening of the average workweek. This shift was primarily the result of the abandoning of share-the-work weeks in the cities of Seattle, where most of the building trades changed from a 30- to a 40-hour week, and Denver, where the change was from 35 to 40. Several trades in other cities also adopted similar schedules.

Only twice before since the beginning of these surveys in 1907 has there been any indication of lengthening of hours—in 1923 and 1937. In all these instances, the increases have been slight and were an accompaniment of a pick-up in business.

### *Average Union Wage Rates, 1941*

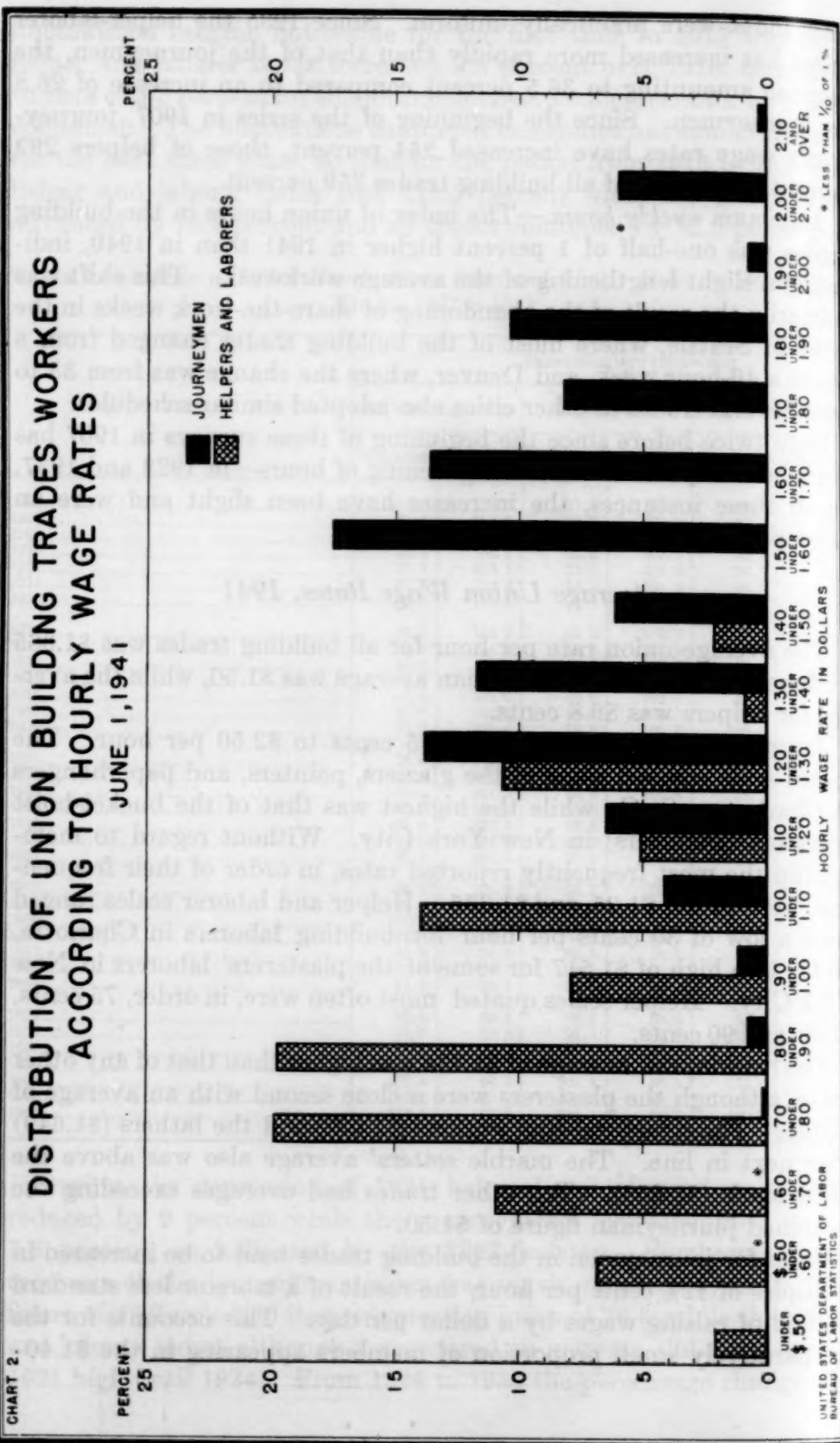
The average union rate per hour for all building trades was \$1.365 on June 1, 1941. The journeyman average was \$1.50, while the average for helpers was 86.8 cents.

Journeyman rates ranged from 55 cents to \$2.50 per hour. The lowest scale covered some of the glaziers, painters, and paperhangers in Charleston, S. C., while the highest was that of the bucket-hoist operators (engineers) in New York City. Without regard to membership the most frequently reported rates, in order of their frequencies, were \$1.50, \$1.25, and \$1.375. Helper and laborer scales ranged from a low of 30 cents per hour for building laborers in Charlotte, N. C., to a high of \$1.517 for some of the plasterers' laborers in New York City. Helper scales quoted most often were, in order, 75 cents, \$1.00, and 90 cents.

The bricklayers' average of \$1.734 was higher than that of any other trade, although the plasterers were a close second with an average of \$1.721. The structural-iron workers (\$1.653) and the lathers (\$1.649) were next in line. The marble setters' average also was above the \$1.60 mark (\$1.605). Ten other trades had averages exceeding the combined journeyman figure of \$1.50.

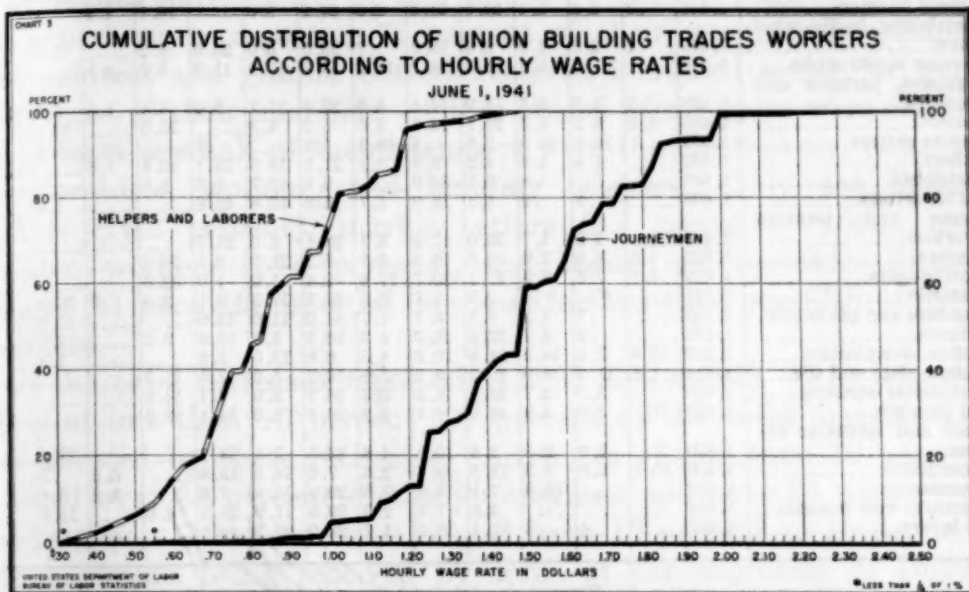
Rates for journeymen in the building trades tend to be increased in multiples of 12½ cents per hour, the result of a more or less standard method of raising wages by a dollar per day. This accounts for the comparatively small proportion of members appearing in the \$1.40-





\$1.50 and the \$1.90-\$2.00 classifications shown in table 2. In 18 of the journeyman trades the majority of members received \$1.50 or more per hour; in 7 of these, plus one other, at least 10 percent of the members were covered by scales of \$2 or more. The lathers had more than 12 percent receiving over \$2.10, all of them in New York City. The mosaic and terrazzo workers and tile layers were the only trades that did not report any scales as high as \$1.80. Only one trade, the structural-iron workers, had no rates lower than \$1.20.

The elevator constructors' helpers (\$1.119) recorded the highest average among the less-skilled group of trades. All of the other



helper and laborer trades except the building laborers and hod carriers had average rates of \$1 or more. Six of the seven helper and laborer trades listed in table 2 reported a majority of their members covered by scales of \$1 or more. The elevator constructors' helpers had the narrowest range, none of their rates being lower than 80 cents or higher than \$1.39. The steam and sprinkler fitters' helpers had over 25 percent of their members listed for scales of at least \$1.50 per hour, while almost 21 percent of the plasterers' laborers received \$1.40 or more.

TABLE 2.—Distribution of Union Members in the Building Trades by Hourly Wage Rates, June 1, 1941

Trade	Average rate per hour	Percentage of union journeymen whose rates (in cents) per hour were—														
		Under 100	100 and under 110	110 and under 120	120 and under 130	130 and under 140	140 and under 150	150 and under 160	160 and under 170	170 and under 180	180 and under 190	190 and under 200	200 and under 210	210 and over		
Journeymen.....	\$1.500	1.1	4.1	6.5	13.8	11.7	6.1	17.5	13.6	8.2	10.4	0.7	6.0	0.3		
Asbestos workers.....	1.517	7.2	.9	.8	9.4	8.7	7.1	32.1	5.3	14.5			14.0			
Boilermakers.....	1.579	.1			1.9	8.5		55.4	8.9	8.0		17.2				
Bricklayers.....	1.734			.2	1.2	3.9	3.4	17.3	18.2	17.7	2.3	4.1	31.7			
Carpenters.....	1.418	1.7	4.6	11.4	21.9	9.4	9.5	12.6	13.3	1.3	14.3					
Cement finishers.....	1.438	.3	1.6	5.1	24.8	21.4	2.0	24.2	9.0		10.1	1.2	.3			
Electricians, inside wiremen.....	1.549	.1	2.3	1.9	8.4	19.9	.7	25.0	6.0	25.0	1.2		9.5			
Elevator constructors.....	1.546		.5	1.5	3.5	14.7	16.2	30.2	10.2	11.8	8.7	2.7				
Engineers, portable and hoisting.....	1.503	.5	5.3	5.3	13.0	14.6	4.0	22.5	11.7	8.0	4.4	1.8	6.9	2.0		
Glaziers.....	1.436	4.3	8.2	9.3	22.7	13.6	5.0	5.2	4.3		15.0		12.4			
Granite cutters.....	1.353		10.9	25.0	2.8	.4	48.3	5.9		.4			6.3			
Lathers.....	1.649		1.4	1.9	4.2	5.9	7.1	21.5	18.5	15.1	10.4	1.8		12.2		
Machinists.....	1.505			.8	6.1	32.0		9.7	42.7	6.8	1.9					
Marble setters.....	1.605		.3	.2	5.1	15.9	1.7	15.8	10.8	48.8			1.4			
Mosaic and terrazzo workers.....	1.466		2.2	1.7	20.0	17.2	6.1	23.1	8.0	21.7						
Painters.....	1.465	1.3	8.8	7.0	10.6	16.8	5.7	5.2	21.7	2.1	20.7		.1			
Paperhangers.....	1.429	1.7	7.6	8.3	17.1	10.7	17.4	2.4	1.0	1.0	32.8					
Plasterers.....	1.721		(1)	.1	2.3	6.3	2.5	24.3	17.3	9.1	2.4	.9	34.8			
Plumbers and gas fitters.....	1.586		.7	1.2	4.1	8.7	1.7	44.0	11.0	15.9			12.7			
Rodmen.....	1.483		.3	4.7	22.9	18.0	4.2	16.3	5.5	16.9	9.5		1.7			
Roofers, composition.....	1.289	10.8	7.2	14.3	24.9	10.8	4.5	6.8	13.6	5.8			1.3			
Roofers, slate and tile.....	1.414	1.5	11.2	4.9	25.2	9.2	5.1	13.2	5.2	13.0	11.5					
Sheet-metal workers.....	1.466		3.0	2.7	21.5	16.5	3.3	25.7	5.9	7.1	14.3					
Sign painters.....	1.528	(1)	5.6	3.0	15.0	9.1	2.8	25.7	8.6	14.1	13.3			2.8		
Steam and sprinkler fitters.....	1.570		3.6	2.5	2.6	10.5	4.8	32.0	7.5	24.7			11.8			
Stonecutters.....	1.406	10.1	5.0	9.3	18.5	9.6	2.5	7.6	16.8	13.8		6.5	.3			
Stonemasons.....	1.532			13.9	7.1	3.6	9.5	29.8	10.9	7.6		9.2	8.4			
Structural-iron workers.....	1.653				2.8	7.8	2.3	29.3	11.9	25.8	4.6		15.5			
Tile layers.....	1.407		.4	.8	17.1	18.5	1.7	23.2	27.7	10.6						

Trade	Average rate per hour	Percentage of union helpers and laborers whose rates (in cents) per hour were—											
		Under 50	50 and under 60	60 and under 70	70 and under 80	80 and under 90	90 and under 100	100 and under 110	110 and under 120	120 and under 130	130 and under 140	140 and under 150	150 and under 160
Helpers and laborers <sup>1</sup> .....	\$0.868	2.1	6.8	10.9	19.8	19.7	7.9	14.0	5.1	10.7	0.9	1.1	1.0
Building laborers.....	.796	3.0	9.0	13.9	24.3	22.1	8.7	12.2	1.2	5.6	(1)		
Elevator constructors' helpers.....	1.119					2.5	16.4	37.7	21.0	6.2	16.2		
Hod carriers (masons' tenders).....	.972	.4	2.5	5.7	12.0	21.6	5.0	14.5	4.2	34.0	.1		
Marble setters' helpers.....	1.081			3.2	10.3	11.4	7.9	23.3	6.0		37.9		
Plasterers' laborers.....	1.073	1.1	1.1	5.5	10.0	6.3	5.2	12.9	29.2	7.6	.2	17.2	3.7
Steam and sprinkler fitters' helpers.....	1.048		.9	6.0	19.2	16.9	4.9	19.8	4.1				28.2
Tile layers' helpers.....	1.015		.3	2.0	14.9	11.5	13.0	18.5	12.9	26.7	.2		

<sup>1</sup> Less than a tenth of 1 percent.<sup>2</sup> Includes also plumbers' laborers and composition roofers' helpers, not shown separately because of the small number of quotations obtained for these trades.

*Changes in Union Wage Rates Between 1940 and 1941*<sup>3</sup>

Table 3 shows that over 40 percent of the comparable quotations and 44 percent of the union members were affected by increases in rates during the past year. Increased rates were shown in 1,023 of the 2,551 journeyman quotations, covering about 43 percent of the total members. Approximately 50 percent of the helpers and laborers received a rise in rates. Reductions in rates were negligible in both groups, only 9 of 2,551 journeyman scales and 2 of 573 helper scales reporting decreases.

All trades participated in this upward swing of wage rates, with the paperhangers reporting 76 percent of their members benefiting. The painters and granite cutters received increased scales for over 70 percent of their members. Other trades whose gains were shared by at least one-half of their members were the electricians, rodmen, structural-iron workers, and building laborers. Only the boiler-makers (19.2 percent), marble setters (3.4 percent), mosaic and terrazzo workers (15.4 percent), and steam and sprinkler fitters' helpers (11 percent) reported increases for less than one-fifth of their members.

Of the total increases reported (1,266) almost half (615) covered raises of less than 10 percent; 29 percent of the total membership was affected by these increases. Advances of less than 10 percent affected over 30 percent of the journeymen and over 24 percent of the helpers. Other increases ranged from 10 percent to 50 percent, the maximum being received by some of the engineers in Butte, Salt Lake City, and San Antonio, and the plumbers' laborers in Charleston, S. C. Increases of at least 40 percent were also obtained for some of the engineers in Binghamton and in Portland, Oreg., as well as some of the painters in Newark. Several other increases of at least 30 percent were reported but the greater part of the increases, according to members affected, amounted to less than 15 percent over the 1940 scales.

<sup>3</sup> Certain anomalies enter into a comparison of average rates between 2 years when such averages reflect not only the actual rates provided for in the agreements but the number of union members for that year in each local union covered by the reported rates. By and large, it would be expected that a general increase in actual rates would be accompanied by a corresponding increase in the average rate paid to union members, but if union membership increases most (or decreases least) in the lower-paid crafts or in areas with less-than-average rates, the average of the rates paid to all union members may not increase correspondingly, or may even show a decrease. Conversely, the average rate may increase in spite of a downward swing in actual rates, if union membership declines sufficiently in the lower-paid crafts or in areas where lower-than-average rates are paid.

Because the averages do not accurately reflect changes from year to year, no table comparing 1940 and 1941 averages is included in this report. For the trend of actual union rates, the table of indexes (table 1) should be consulted, since these are so computed as to eliminate the effect of fluctuating memberships at various rates. The current averages, on the other hand, best serve for comparison of the general level of wage rates between trades, or between cities and regions at the time the survey was made.



TABLE 3.—Number of Changes in Union Wage-Rate Quotations and Percent of Members Affected, June 1, 1941, Compared with June 1, 1940

Trade	Number of quotations comparable with 1940	Number of quotations showing—			Percentage of union members affected—		
		Increase	De-crease	No change	Increase	De-crease	No change
All building trades.....	3, 124	1, 266	11	1, 847	44. 3	0. 1	55. 6
Journeyemen.....	2, 551	1, 023	9	1, 519	42. 9	. 1	57. 0
Asbestos workers.....	65	39	—	26	49. 1	—	50. 9
Boilermakers.....	47	12	—	35	19. 2	—	80. 8
Bricklayers.....	82	26	—	56	29. 5	—	70. 5
Carpenters.....	122	57	—	65	33. 6	—	66. 4
Cement finishers.....	76	25	—	51	42. 1	—	57. 9
Electricians, inside wiremen.....	96	46	—	50	52. 7	—	47. 3
Elevator constructors.....	127	60	—	67	43. 2	—	56. 8
Engineers, portable and hoisting.....	408	202	2	204	30. 6	. 6	68. 8
Glaziers.....	73	31	—	42	49. 1	—	50. 9
Granite cutters.....	27	8	—	19	70. 5	—	29. 5
Lathers.....	90	26	—	64	39. 8	—	60. 2
Machinists.....	34	13	—	21	41. 0	—	59. 0
Marble setters.....	70	8	—	62	3. 4	—	96. 6
Mosaic and terrazzo workers.....	66	12	—	54	15. 4	—	84. 6
Painters.....	134	67	3	64	70. 3	. 2	29. 5
Paperhangers.....	71	37	1	33	76. 1	1. 1	22. 8
Plasterers.....	81	18	—	63	21. 3	—	78. 7
Plumbers and gas fitters.....	87	47	—	40	48. 6	—	51. 4
Rodmen.....	71	32	—	39	54. 2	—	45. 8
Roofers, composition.....	105	46	2	57	39. 9	. 3	59. 8
Roofers, slate and tile.....	63	18	1	44	23. 7	. 7	75. 6
Sheet-metal workers.....	67	38	—	29	48. 4	—	51. 6
Sign painters.....	72	25	—	47	23. 3	—	76. 7
Steam and sprinkler fitters.....	112	54	—	58	39. 8	—	60. 2
Stonecutters.....	80	7	—	73	27. 9	—	72. 1
Stonemasons.....	73	22	—	51	31. 7	—	68. 3
Structural-iron workers.....	78	34	—	44	57. 2	—	42. 8
Tile layers.....	74	13	—	61	21. 0	—	79. 0
Helpers and laborers.....	573	243	2	328	49. 6	(1)	50. 4
Building laborers.....	85	48	—	37	59. 5	—	40. 5
Composition roofers' helpers.....	30	10	1	19	27. 7	3. 6	68. 7
Elevator constructors' helpers.....	95	51	—	44	39. 7	—	60. 3
Hod carriers (masons' tenders).....	95	45	1	49	32. 8	. 1	67. 1
Marble setters' helpers.....	48	14	—	34	20. 2	—	79. 8
Plasterers' laborers.....	75	30	—	45	26. 2	—	73. 8
Plumbers' laborers.....	41	18	—	23	43. 4	—	56. 6
Steam and sprinkler fitters' helpers.....	54	11	—	43	11. 0	—	89. 0
Tile layers' helpers.....	50	16	—	34	35. 5	—	64. 5

<sup>1</sup> Less than a tenth of 1 percent.

TABLE 4.—Number of Increases in Union Wage-Rate Quotations, and Percent of Members Affected, by Percent of Increase, June 1, 1941, Compared With June 1, 1940

Trade	Number of quotations showing increases of—						Percentage of total members affected by increases of—					
	Less than 10 per cent	10 and under 15 per cent	15 and under 20 per cent	20 and under 25 per cent	25 and under 30 per cent	30 per cent and over	Less than 10 per cent	10 and under 15 per cent	15 and under 20 per cent	20 and under 25 per cent	25 and under 30 per cent	30 per cent and over
All building trades.....	615	398	71	100	57	25	29.0	9.7	2.3	1.9	1.1	0.3
Journeyman.....	502	333	49	75	47	17	30.4	9.4	1.0	1.1	.9	.1
Asbestos workers.....	28	8	—	2	—	1	42.7	5.1	—	.7	—	.6
Boilermakers.....	9	2	—	1	—	—	12.3	6.6	—	.3	—	—
Bricklayers.....	17	4	—	3	2	—	23.1	3.7	—	2.2	.5	—
Carpenters.....	30	22	3	—	1	1	25.5	7.7	.4	(1)	(1)	—
Cement finishers.....	13	6	1	4	1	—	30.0	8.4	—	2.9	.4	—
Electricians, inside wiremen.....	19	19	3	2	3	—	31.2	16.9	1.5	.6	2.5	—
Elevator constructors.....	55	3	2	—	—	—	39.8	3.1	.3	—	—	—
Engineers, portable and hoisting.....	71	81	11	14	13	12	14.7	7.5	2.9	2.7	1.7	1.1
Glaziers.....	11	18	1	1	—	—	36.5	11.4	.8	.4	—	—
Granite cutters.....	7	1	—	—	—	—	70.2	.3	—	—	—	—
Lathers.....	12	6	—	6	1	1	29.2	3.3	—	2.8	4.4	.1
Machinists.....	5	4	—	2	2	—	32.4	5.3	—	2.3	1.0	—
Marble setters.....	2	5	—	1	—	—	1.5	1.7	—	.2	—	—
Mosaic and terrazzo workers.....	6	5	—	1	—	—	11.8	3.5	—	.1	—	—
Painters.....	27	23	4	6	6	1	51.0	16.0	.6	1.0	1.6	.1
Paperhangers.....	16	17	1	2	1	—	55.0	20.1	.3	.6	.1	—
Plasterers.....	10	4	—	3	1	—	13.7	5.0	—	2.4	.2	—
Plumbers and gas fitters.....	24	9	4	7	3	—	35.1	7.2	2.1	3.1	1.1	—
Rodmen.....	14	11	2	1	4	—	33.0	11.2	3.5	1.2	5.3	—
Roofers, composition.....	18	21	3	3	—	1	17.2	18.9	.4	2.9	—	.5
Roofers, slate and tile.....	10	7	—	1	—	—	10.9	12.5	—	.3	—	—
Sheet-metal workers.....	19	13	4	1	1	—	28.8	13.6	1.8	1.4	2.8	—
Sign painters.....	9	13	2	—	1	—	10.8	11.2	.8	—	—	—
Steam and sprinkler fitters.....	29	8	6	7	4	—	32.2	2.1	2.0	2.0	1.5	—
Stonecutters.....	4	3	—	—	—	—	22.2	5.7	—	—	—	—
Stonemasons.....	13	5	—	2	2	—	13.4	16.1	—	1.9	.3	—
Structural-iron workers.....	20	8	2	4	—	—	40.7	6.8	6.5	3.2	—	—
Tile layers.....	4	7	—	1	1	—	14.3	6.0	—	.6	.1	—
Helpers and laborers.....	113	65	22	25	10	8	24.3	10.7	6.9	4.8	1.9	1.0
Building laborers.....	17	15	5	7	4	—	31.0	11.5	8.7	6.1	2.2	—
Composition roofers' helpers.....	2	4	1	2	1	—	2.0	12.6	7.3	4.9	.9	—
Elevator constructors' helpers.....	45	4	2	—	—	—	36.7	2.7	.3	—	—	—
Hod carriers (masons' tenders).....	14	14	6	6	1	4	12.8	10.1	1.8	2.6	.7	4.8
Marble setters' helpers.....	7	5	1	—	1	—	11.5	6.8	.7	—	1.2	—
Plasterers' laborers.....	12	9	3	3	1	2	12.1	7.6	1.0	4.0	.9	.6
Plumbers' laborers.....	4	7	2	3	2	—	4.9	15.1	17.0	1.7	4.7	—
Steam and sprinkler fitters' helpers.....	5	—	2	—	—	2	4.4	—	.8	.6	—	5.2
Tile layers' helpers.....	7	7	—	2	—	—	26.1	8.3	—	1.1	—	—

<sup>1</sup> Less than a tenth of 1 percent.*Average Rates in Each City*<sup>4</sup>

The average rate per hour for all building journeymen was highest in New York City (\$1.823); its neighbor city, Newark, ranked second (\$1.798). Next in line were Chicago (\$1.717) and Washington (\$1.651). In addition to these 4 cities, Pittsburgh (\$1.595), Cleveland

<sup>4</sup> The averages herein presented are weighted according to the number of members in each local union covered by the reported rates and in many cases may be lower than a simple average of specific rates due to heavy memberships at the less-skilled trades which carry the lower rates. While a comparison of average rates between cities where averages including the influence of the weighting factor (membership) may be misleading due to unusually high or low memberships in some cities in comparison with the same trades in other cities, a weighted average of this kind is obviously more realistic than a simple average. In the latter case, a wage rate for a trade including half a dozen members would be given the same importance as a trade including several hundred members.

(\$1.542), St. Louis (\$1.524) and Detroit (\$1.511) had averages higher than the average for all 75 cities together which was \$1.50. The majority of cities had averages between \$1.25 and \$1.50. Only 2—Charlotte, N. C., and Portland, Maine—had averages less than \$1 per hour, but in both cases the difference was very slight (99.8 and 99.6 cents).

Not all of the trades had effective union rates in all of the cities. This was especially true among the helper and laborer trades, particularly in the smaller cities. In order to insure comparability in the composition of the averages, and recognizing the numerical importance of the building laborers within the helper and laborer group of trades, no city averages have been shown in the absence of effective union rates for at least one helper trade and a substantial number of building laborers. In many of the smaller cities no union rates were reported for the more unskilled occupations. To some extent this tended to raise their averages higher than they would have been had all of the helper and laborer trades been included.

In the helper and laborer group the same three cities had the highest averages as was the case for the journeymen: New York (\$1.192), Newark (\$1.110), and Chicago (\$1.039). However, Washington, which ranked fourth for journeymen, was twelfth from the top in average rates for helpers and laborers. Cleveland, which ranked eighth for journeymen, took fourth place for the unskilled group. In only these four cities were helper averages over \$1 per hour, although a majority had average rates of \$0.85 or more and only 16 had averages under \$0.60.

TABLE 5.—Average Union Hourly Wage Rates in the Building Trades, by Cities and Population Groups, June 1, 1941

City and population group	Average hourly rate	City and population group	Average hourly rate
<i>Journeymen</i>		<i>Journeymen—Continued</i>	
Population group I (over 1,000,000):		Population group III—Continued.	
New York, N. Y.	\$1.823	Rochester, N. Y.	\$1.413
Chicago, Ill.	1.717	Seattle, Wash.	1.413
Average for group I.	1.670	Kansas City, Mo.	1.397
Detroit, Mich.	1.511	Average for group III.	1.579
Philadelphia, Pa.	1.477	Indianapolis, Ind.	1.377
Los Angeles, Calif.	1.275	Columbus, Ohio.	1.362
Population group II (500,000 to 1,000,000):		Minneapolis, Minn.	1.334
Washington, D. C.	1.651	Louisville, Ky.	1.323
Pittsburgh, Pa.	1.595	Memphis, Tenn.	1.312
Cleveland, Ohio.	1.542	Birmingham, Ala.	1.308
St. Louis, Mo.	1.524	Portland, Oreg.	1.303
Boston, Mass.	1.479	Houston, Tex.	1.302
Average for group II.	1.461	St. Paul, Minn.	1.302
Buffalo, N. Y.	1.445	Dallas, Tex.	1.263
Baltimore, Md.	1.338	Providence, R. I.	1.253
San Francisco, Calif.	1.311	San Antonio, Tex.	1.246
Milwaukee, Wis.	1.251	New Orleans, La.	1.227
Population group III (250,000 to 500,000):		Atlanta, Ga.	1.203
Newark, N. J.	1.798	Population group IV (100,000 to 250,000):	
Cincinnati, Ohio.	1.462	Youngstown, Ohio.	1.482
Denver, Colo.	1.462	Dayton, Ohio.	1.459
Toledo, Ohio.	1.439	Peoria, Ill.	1.415

<sup>1</sup> Includes Rock Island, Ill., Davenport, Iowa, and Moline, Ill.



TABLE 5.—Average Union Hourly Wage Rates in the Building Trades, by Cities and Population Groups, June 1, 1941—Continued

City and population group	Average hourly rate	City and population group	Average hourly rate
<i>Journeyman—Continued</i>		<i>Helpers and laborers—Continued</i>	
<i>Population group IV—Continued.</i>		<i>Population group III—Continued.</i>	
South Bend, Ind.	\$1.382	Seattle, Wash.	\$0.970
New Haven, Conn.	1.367	Minneapolis, Minn.	.952
Rock Island (Ill.) district <sup>1</sup>	1.341	Kansas City, Mo.	.877
Erie, Pa.	1.335	St. Paul, Minn.	.874
Springfield, Mass.	1.332	Cincinnati, Ohio.	.861
Spokane, Wash.	1.328	Portland, Oreg.	.848
Des Moines, Iowa.	1.308	Indianapolis, Ind.	.809
Oklahoma City, Okla.	1.804	Toledo, Ohio.	.797
Reading, Pa.	1.287	Denver, Colo.	.776
Scranton, Pa.	1.278	Providence, R. I.	.765
Average for group IV.	1.275	Rochester, N. Y.	.764
Omaha, Nebr.	1.274	Average for group III.	.762
Grand Rapids, Mich.	1.246	Columbus, Ohio.	.668
Nashville, Tenn.	1.240	Memphis, Tenn.	.654
Worcester, Mass.	1.239	Houston, Tex.	.634
Salt Lake City, Utah.	1.233	Louisville, Ky.	.630
Duluth, Minn.	1.231	Dallas, Tex.	.595
Norfolk, Va.	1.190	New Orleans, La.	.569
Richmond, Va.	1.180	Birmingham, Ala.	.545
Wichita, Kans.	1.138	San Antonio, Tex.	.496
Jacksonville, Fla.	1.119	<i>Population group IV (100,000 to 250,000):</i>	
Tampa, Fla.	1.116	Spokane, Wash.	.893
Charlotte, N. C.	.998	Peoria, Ill.	.881
<i>Population group V (40,000 to 100,000):</i>		South Bend, Ind.	.874
Butte, Mont.	1.486	Salt Lake City, Utah.	.857
Charleston, W. Va.	1.373	New Haven, Conn.	.853
Binghamton, N. Y.	1.295	Rock Island (Ill.) district <sup>1</sup>	.806
El Paso, Tex.	1.290	Youngstown, Ohio.	.790
Phoenix, Ariz.	1.268	Worcester, Mass.	.764
Average for group V.	1.224	Des Moines, Iowa.	.762
Mobile, Ala.	1.219	Erie, Pa.	.743
Madison, Wis.	1.211	Duluth, Minn.	.734
Little Rock, Ark.	1.190	Springfield, Mass.	.719
Jackson, Miss.	1.165	Average for group IV.	.690
Manchester, N. H.	1.121	Reading, Pa.	.684
Charleston, S. C.	1.086	Scranton, Pa.	.673
York, Pa.	1.054	Dayton, Ohio.	.672
Portland, Maine.	.996	Omaha, Nebr.	.657
<i>Helpers and laborers</i>		Norfolk, Va.	.572
<i>Population group I (over 1,000,000):</i>		Jacksonville, Fla.	.569
New York, N. Y.	1.192	Grand Rapids, Mich.	.559
Chicago, Ill.	1.039	Oklahoma City, Okla.	.547
Average for group I.	1.035	Wichita, Kans.	.516
Detroit, Mich.	.880	Richmond, Va.	.510
Los Angeles, Calif.	.821	Tampa, Fla.	.457
Philadelphia, Pa.	.732	Nashville, Tenn.	.422
<i>Population group II (500,000 to 1,000,000):</i>		Charlotte, N. C.	.389
Cleveland, Ohio.	1.015	<i>Population group V (40,000 to 100,000):</i>	
St. Louis, Mo.	.950	Butte, Mont.	.966
San Francisco, Calif.	.921	Manchester, N. H.	.795
Pittsburgh, Pa.	.885	Phoenix, Ariz.	.781
Boston, Mass.	.884	Madison, Wis.	.772
Milwaukee, Wis.	.884	Binghamton, N. Y.	.715
Average for group II.	.872	Portland, Maine.	.706
Washington, D. C.	.869	Average for group V.	.646
Buffalo, N. Y.	.758	Charleston, W. Va.	.635
Baltimore, Md.	.686	York, Pa.	.611
<i>Population group III (250,000 to 500,000):</i>		Mobile, Ala.	.533
Newark, N. J.	1.110	El Paso, Tex.	.508
		Charleston, S. C.	.448

<sup>1</sup> Includes Rock Island, Ill., Davenport, Iowa, and Moline, Ill.



*Average Rate Changes in Each City<sup>1</sup>*

Based on comparable quotations for the years 1941 and 1940, the city of Norfolk registered the greatest average increase (12.6 percent) in union rates among the journeymen. The average rate for 1941, however, remained considerably below the average for cities of comparable size (table 5). This gain was attributed, in the main, to increases of 25 cents per hour for the electricians, plumbers, and the ironworkers, although other trades also had increases. Other cities showing advances of over 10 percent were Jacksonville, Fla., Portland, Maine, and York, Pa. In spite of these appreciable gains, the average rates for these cities remained lower than the average for each of their size groups. Of the 75 cities covered, 35 in addition to those mentioned above exceeded the Nation-wide increase of 3.5 percent for journeymen; two others exactly equaled it. Only Manchester, N. H., had no increases among all the journeymen, although 5 others had an average increase of less than 1 percent—Des Moines, Kansas City, St. Louis, San Francisco, and Toledo (table 6).

Among the helpers, the average percentage increases tended to be higher and more varied. Jacksonville showed the largest increase (over 25 percent), as a result of substantial increases for all of the trades reported. Charleston, W. Va., Dallas, and Mobile also had average gains of 20 percent or more. In spite of these gains, the average rates for helpers and laborers in all four of these cities remain below the average for the cities in their size group.

Thirty-four other cities had increases greater than the average increase for all cities (4.8 percent). However, 11 cities registered no gains whatever and in 10 cities the increases amounted to less than 1 percent. Composition roofers' helpers' and hod carriers' scales in York, Pa., were reduced, causing an average slightly lower than last year.

<sup>1</sup> These net changes are based on specific rates weighted by membership for each union. Only those trades showing comparable data for both years are included. Inasmuch as building trades' wage rates tend to be changed by additions of either  $12\frac{1}{4}$  or 10 cents per hour, specific increases for 1941 will reflect larger percentage changes among those trades with comparatively lower actual scales, e. g., if the carpenters in city A changed their scale from \$1.00 to \$1.125 an increase of  $12\frac{1}{4}$  percent is registered, while if in city B the increase is from \$1.50 to \$1.625, the percentage change is only  $8\frac{1}{4}$  percent. For this reason those cities having the low actual scales will tend to show greater percentage increases than those with high scales. Both tables 5 and 6 should be consulted in making comparisons between cities.

TABLE

All cities

Atlanta,  
Baltimore,  
Birmingham,  
Boston,  
Buffalo,  
Butte, Mont.  
Charleston, W. Va.,  
Chicago,  
Cincinnati,  
Cleveland,  
Columbus,  
Dallas,  
Dayton,  
Denver,  
Des Moines,  
Detroit,  
Duluth,  
El Paso,  
Erie, Pa.,  
Grand Rapids,  
Houston,  
Indianapolis,  
Jacksonville, Fla.,  
Kansas City,  
Little Rock,  
Los Angeles,  
Louisville,  
Madison,  
Manchester, N. H.,  
Memphis,  
Milwaukee,  
Minneapolis

<sup>1</sup> In  
<sup>2</sup> No  
<sup>3</sup> Le  
<sup>4</sup> In

TABLE 6.—Percent of Change in Union Building-Trades Wage Rates in Each City, June 1, 1940, to June 1, 1941

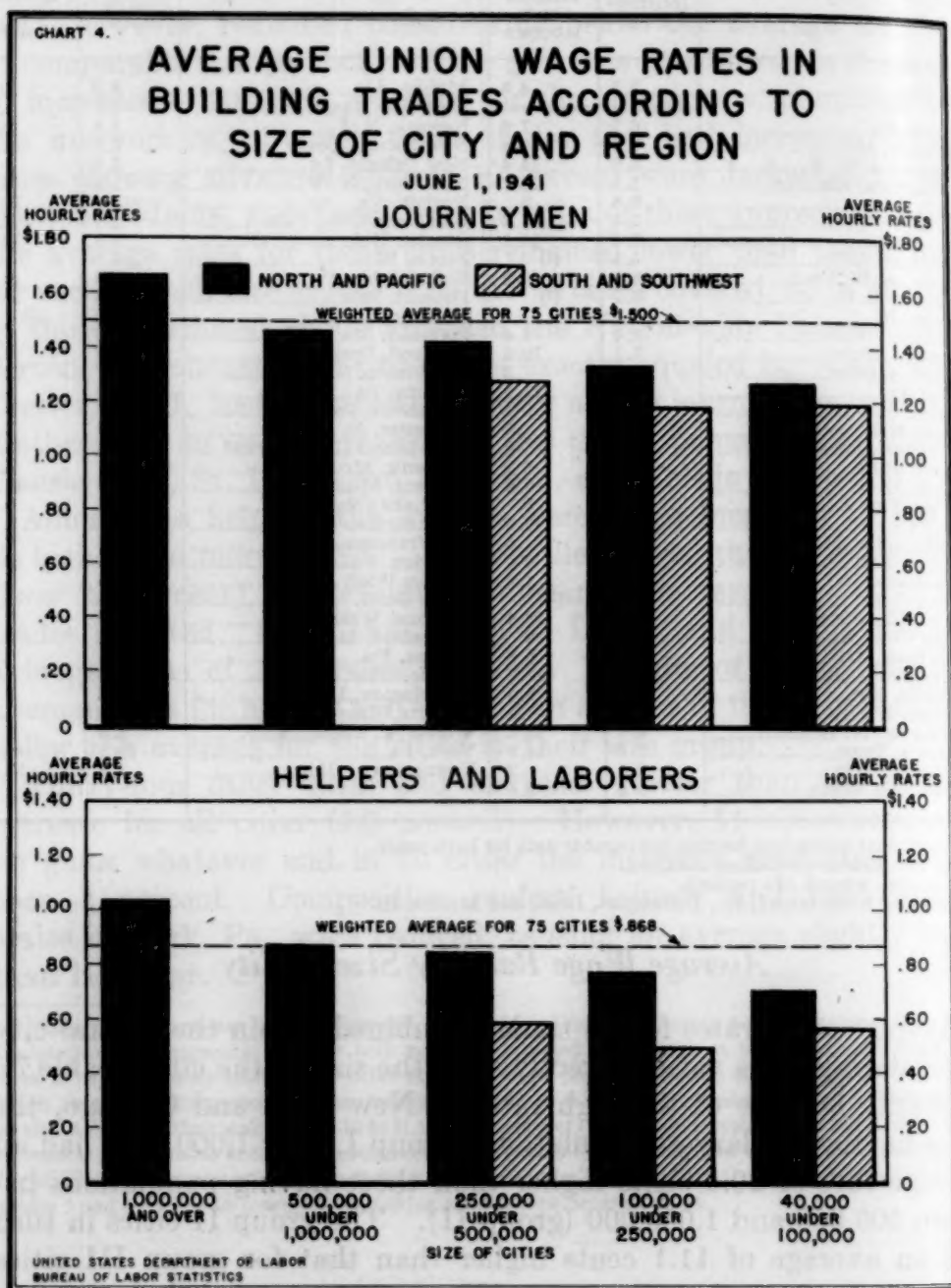
City	Percent of increase		City	Percent of increase	
	Journey-men	Helpers and laborers		Journey-men	Helpers and laborers
All cities.....	3.5	4.8	Mobile, Ala.....	8.3	20.0
Atlanta, Ga.....	6.7	7.6	Nashville, Tenn.....	3.7	.1
Baltimore, Md.....	1.9	9.4	Newark, N. J.....	5.6	1.3
Binghamton, N. Y.....	5.0	14.4	New Haven, Conn.....	7.7	11.4
Birmingham, Ala.....	2.5	16.7	New Orleans, La.....	2.5	.1
Boston, Mass.....	4.6	0	New York, N. Y.....	1.6	2.6
Buffalo, N. Y.....	7.4	13.8	Norfolk, Va.....	12.6	18.8
Butte, Mont.....	3.5	10.1	Oklahoma City, Okla.....	3.7	0
Charleston, S. C.....	5.5	( <sup>1</sup> )	Omaha, Nebr.....	5.3	12.4
Charleston, W. Va.....	8.1	20.0	Peoria, Ill.....	1.1	.1
Charlotte, N. C.....	3.7	( <sup>1</sup> )	Philadelphia, Pa.....	7.6	2.4
Chicago, Ill.....	3.0	.2	Phoenix, Ariz.....	6.8	17.6
Cincinnati, Ohio.....	1.4	4.4	Pittsburgh, Pa.....	2.5	( <sup>2</sup> )
Cleveland, Ohio.....	7.1	10.5	Portland, Maine.....	10.5	7.8
Columbus, Ohio.....	6.2	.3	Portland, Oreg.....	6.2	8.9
Dallas, Tex.....	2.2	21.1	Providence, R. I.....	1.7	12.7
Dayton, Ohio.....	2.4	0	Reading, Pa.....	3.9	4.9
Denver, Colo.....	2.8	.3	Richmond, Va.....	10.7	0
Des Moines, Iowa.....	.3	0	Rochester, N. Y.....	3.5	4.6
Detroit, Mich.....	9.1	6.2	Rock Island (Ill.) district <sup>4</sup> .....	6.4	13.5
Duluth, Minn.....	3.4	9.9	St. Louis, Mo.....	.7	4.3
El Paso, Tex.....	2.8	0	St. Paul, Minn.....	1.5	11.2
Erie, Pa.....	5.0	19.6	Salt Lake City, Utah.....	6.8	9.5
Grand Rapids, Mich.....	5.7	.6	San Antonio, Tex.....	2.8	1.7
Houston, Tex.....	1.1	0	San Francisco, Calif.....	.8	3.6
Indianapolis, Ind.....	1.7	4.6	Scranton, Pa.....	2.0	0
Jackson, Miss.....	2.4	( <sup>3</sup> )	Seattle, Wash.....	5.8	5.4
Jacksonville, Fla.....	10.6	25.4	South Bend, Ind.....	9.6	13.0
Kansas City, Mo.....	.6	0	Spokane, Wash.....	2.5	0
Little Rock, Ark.....	8.2	6.8	Springfield, Mass.....	4.4	2.7
Los Angeles, Calif.....	5.1	19.3	Tampa, Fla.....	4.9	.1
Louisville, Ky.....	4.6	8.6	Toledo, Ohio.....	.7	.7
Madison, Wis.....	2.8	7.3	Washington, D. C.....	1.2	5.7
Manchester, N. H.....	0	15.5	Wichita, Kans.....	6.2	9.5
Memphis, Tenn.....	7.6	14.9	Worcester, Mass.....	3.6	0
Milwaukee, Wis.....	2.1	.2	York, Pa.....	10.3	—, 6
Minneapolis, Minn.....	2.6	5.4	Youngstown, Ohio.....	7.8	13.8

<sup>1</sup> Insufficient quotations having comparable data for both years.<sup>2</sup> No comparable quotations obtained.<sup>3</sup> Less than a tenth of 1 percent.<sup>4</sup> Includes Rock Island, Ill., Davenport, Iowa, and Moline, Ill.

### Average Wage Rates by Size of City

Average wage rates for all trades combined within the several city population groups varied directly with the size of the cities (table 7). Primarily because of the high rates in New York and Chicago, the cities having the largest populations (group I, over 1,000,000) had an average rate of 20.5 cents higher than those having populations between 500,000 and 1,000,000 (group II). The group II cities in turn had an average of 11.1 cents higher than that for group III cities (250,000 to 500,000). The group III average exceeded that of group IV (100,000 to 250,000) by 9.4 cents, and the group IV average exceeded the group V (40,000 to 100,000) average by 8.4 cents. The same general relationship between the average hourly wage rates and the city sizes prevailed not only for all building trades combined, but also for the averages for the journeyman group and the helper and laborer group.

In the North and Pacific region the same direct variation between the averages and the city sizes held for all trades combined, the journeyman group, and the helper and laborer group. The same condition did not exist among the averages for the South and Southwest city



groups, as the averages for group V cities were consistently larger than the averages for group IV cities. This was largely due to the comparatively higher rates in Phoenix, El Paso, and Mobile, each of which reported higher average rates than did Norfolk, Richmond, Wichita, Jacksonville, Tampa, and Charlotte in group IV.



Although the influence of the relatively high average rates in Newark and Butte was not evident in the three main averages (all trades, journeymen, and helpers and laborers) nevertheless these rates were factors in causing several individual trades to show group averages not in direct variation in the North and Pacific region. The averages of seven journeyman trades and three helper trades were higher in group III cities than those in group II. Newark's high rates, second only to New York, on the average, had much to do with these differences. Butte's high average was the chief factor in the higher rates in group V cities than in group IV for five journeyman and two helper trades.

The plasterers recorded the highest average rates in group I cities, closely followed by the bricklayers; the structural-iron workers registered the high figure for groups II and IV; the bricklayers in groups III and V. The plasterers' laborers showed the highest average among all helper trades in group I cities; elevator constructors' helpers led the field in groups II, III, and IV; marble setters' helpers had the highest average in group V.

### Regional Differences

Since there is no city in the South or Southwest with a population of over 500,000, any comparison of average rates must be confined to population groups III, IV, and V (table 7).

TABLE 7.—Average Union Wage Rates in Each Building Trade, by Region and Population Group, June 1, 1941

Trade	Cities in population group <sup>1</sup>										
	Group I <sup>2</sup>	Group II <sup>2</sup>	Group III			Group IV			Group V		
	North and Pacific	North and Pacific	All cities	North and Pacific	South and South-west	All cities	North and Pacific	South and South-west	All cities	North and Pacific	South and South-west
All building trades.....	\$1. 548	\$1. 343	\$1. 232	\$1. 292	\$1. 116	\$1. 138	\$1. 192	\$1. 037	\$1. 054	\$1. 070	\$1. 040
Journeymen.....	1. 670	1. 461	1. 379	1. 430	1. 279	1. 275	1. 334	1. 173	1. 224	1. 267	1. 190
Asbestos workers.....	1. 652	1. 523	1. 400	1. 381	1. 434	1. 341	1. 366	1. 309	1. 348	1. 439	1. 318
Boilermakers.....	1. 742	1. 510	1. 482	1. 528	1. 402	1. 451	1. 453	1. 411	1. 479	1. 484	1. 467
Bricklayers.....	1. 866	1. 634	1. 591	1. 642	1. 486	1. 513	1. 561	1. 413	1. 496	1. 530	1. 445
Carpenters.....	1. 626	1. 386	1. 308	1. 375	1. 197	1. 172	1. 254	1. 070	1. 107	1. 148	1. 077
Cement finishers.....	1. 591	1. 454	1. 351	1. 363	1. 329	1. 250	1. 311	1. 159	1. 250	1. 298	1. 236
Electricians, inside wiremen.....	1. 664	1. 548	1. 515	1. 545	1. 435	1. 333	1. 344	1. 315	1. 270	1. 308	1. 241
Elevator constructors.....	1. 664	1. 551	1. 455	1. 478	1. 415	1. 351	1. 377	1. 265	1. 247	1. 249	1. 245
Engineers, portable and hoisting.....	1. 649	1. 597	1. 407	1. 489	1. 285	1. 368	1. 403	1. 285	1. 355	1. 429	1. 290
Glaziers.....	1. 703	1. 395	1. 227	1. 268	1. 103	1. 090	1. 155	.882	1. 045	1. 092	.997
Granite cutters.....	1. 418	1. 185	1. 215	1. 215	-----	1. 125	1. 125	-----	-----	-----	-----
Lathers.....	1. 783	1. 603	1. 509	1. 550	1. 409	1. 471	1. 473	1. 468	1. 234	1. 419	1. 142
Machinists.....	1. 621	1. 493	1. 380	1. 537	1. 322	1. 263	1. 275	1. 250	( <sup>3</sup> )	-----	( <sup>3</sup> )
Marble setters.....	1. 708	1. 512	1. 490	1. 511	1. 428	1. 388	1. 430	1. 324	1. 413	1. 321	1. 450
Mosaic and terrazzo workers.....	1. 633	1. 403	1. 376	1. 362	1. 416	1. 356	1. 386	1. 250	1. 341	1. 303	1. 367
Painters.....	1. 614	1. 371	1. 266	1. 324	1. 123	1. 131	1. 193	1. 006	1. 068	1. 045	1. 093

See footnotes at end of table.



TABLE 7.—Average Union Wage Rates in Each Building Trade, by Region and Population Group, June 1, 1941—Continued

Trade	Cities in population group <sup>1</sup>										
	Group I <sup>2</sup>	Group II <sup>3</sup>	Group III			Group IV			Group V		
	North and Pacific	North and Pacific	All cities	North and Pacific	South and Southwest	All cities	North and Pacific	South and Southwest	All cities	North and Pacific	South and Southwest
Journeyman—Con.											
Paperhangers.....	\$1.697	\$1.373	\$1.233	\$1.284	\$1.069	\$1.138	\$1.168	\$1.021	\$1.097	\$1.156	\$0.965
Plasterers.....	1.886	1.664	1.544	1.587	1.470	1.481	1.495	1.453	1.412	1.468	1.369
Plumbers and gas fitters.....	1.712	1.548	1.505	1.510	1.494	1.384	1.371	1.409	1.427	1.390	1.450
Rodmen.....	1.600	1.618	1.373	1.445	1.257	1.394	1.485	1.235	1.244	1.404	1.170
Roofers, composition.....	1.502	1.288	1.205	1.294	.946	1.077	1.124	.932	1.028	1.044	1.022
Roofers, slate and tile.....	1.646	1.552	1.334	1.370	1.266	1.196	1.261	.982	1.106	1.191	1.010
Sheet-metal workers.....	1.651	1.433	1.408	1.431	1.352	1.248	1.322	1.073	1.139	1.253	1.079
Sign painters.....	1.768	1.508	1.372	1.384	1.343	1.217	1.275	1.089	1.223	1.261	1.201
Steam and sprinkler fitters.....	1.695	1.495	1.461	1.453	1.500	1.374	1.377	1.367	1.433	1.413	1.457
Stonecutters.....	1.470	1.368	1.282	1.306	1.055	1.264	1.264	.....	.....	.....	.....
Stonemasons.....	1.546	1.517	1.549	1.572	1.472	1.489	1.508	1.383	1.397	1.450	1.344
Structural-iron workers.....	1.786	1.693	1.546	1.593	1.470	1.533	1.566	1.456	1.392	1.453	1.350
Tile layers.....	1.576	1.452	1.430	1.460	1.340	1.336	1.388	1.250	1.406	1.353	1.460
Helpers and laborers <sup>4</sup> .....	1.035	.872	.762	.852	.584	.690	.772	.495	.646	.703	.569
Building laborers.....	.943	.822	.719	.810	.556	.638	.718	.443	.619	.678	.537
Elevator constructors' helpers.....	1.195	1.127	1.046	1.066	1.006	.968	.991	.902	.897	.877	.921
Hod carriers (masons' tenders).....	1.109	.937	.850	.934	.676	.795	.846	.569	.708	.792	.623
Marble setters' helpers.....	1.250	.921	.977	1.015	.694	.821	.872	.650	1.004	( <sup>5</sup> )	.740
Plasterers' laborers.....	1.291	1.086	.939	1.033	.700	.803	.964	.601	.820	.861	.741
Steam and sprinkler fitters' helpers.....	1.207	.892	.885	.904	.750	.674	.720	.574	.739	.725	.730
Tile layers' helpers.....	1.111	.936	.907	.946	.600	.826	.866	.644	.899	1.139	.788

<sup>1</sup> Group I includes cities of over 1,000,000 population; group II, 500,000 to 1,000,000; group III, 250,000 to 500,000; group IV, 100,000 to 250,000; and group V, 40,000 to 100,000.

<sup>2</sup> No city of this size in the South or the Southwest.

<sup>3</sup> Reports for these trades were received from only 1 city in each of these classifications; therefore, no average could be shown.

<sup>4</sup> Includes also plumbers' laborers and composition roofers' helpers, not shown separately because of the small number of quotations obtained for these trades.

Within the city-size classifications the averages for all building trades combined, as well as for both the journeyman and the helper and laborer groups of trades, were consistently higher in the North and Pacific region than in the South and Southwest.

This relationship evidenced itself in all but six of the journeyman trades and two of the helper trades. Most of these eight exceptions were in group V cities, where the influence of Phoenix and El Paso was apparent. In three cases—asbestos workers, mosaic and terrazzo workers, and steam and sprinkler fitters—the average for the South and Southwest among group III cities exceeded the average rates for the North and Pacific.

### Hours Per Week

The 40-hour week was the most prevalent working period among the building trades, over 75 percent of the journeymen and almost 66

percent of the helpers and laborers operating on this schedule (table 8). The normal trend in the building trades has been consistently downward. However, this year, in addition to reductions from a longer workweek, there have been several upward movements in which trades have shifted from a 30- or 35-hour week to the 40-hour schedule. The building trades in Seattle and Denver were particularly outstanding in this respect.

The greater portion of those members not on a 40-hour week were scheduled to work less than that number, only 5 percent of all building-trades workers having maximum normal weeks of more than 40 hours. Among journeymen a longer workweek was rare, as only a little over 1 percent of the members were thus affected. On the other hand, the helpers and laborers, chiefly the building laborers, had appreciable numbers of members on a 44-hour week basis. In other individual helper trades a week of less than 40 hours was more common than a week of over 40 hours.

The 35-hour week covered 15.6 percent of all building-trades workers (journeymen 16.7 percent, helpers 11.5 percent). There were no trades that did not have 35-hour-week schedules. In fact, 55.5 percent of the granite cutters and 35.4 percent of the bricklayers operated on this schedule. In addition, over one-third of the hod carriers and marble setters' helpers had 35-hour weeks.

The 30-hour week was also quite frequent, especially in certain trades. The plasterers reported almost 44 percent of their members on this shorter schedule. The paperhangers (31 percent), lathers (22.2 percent), painters (20.7 percent), had substantial numbers of their members on a 30-hour week, while among the less skilled group, the plasterers' laborers and steam and sprinkler fitters' helpers provided the 30-hour week for over 28 percent of their members.

These various weekly working schedules, weighted by the membership in each case, had the effect of producing an average workweek of 38.8 hours for all building trades. The journeyman average was slightly lower than that for all trades (38.5), while the helpers and laborers, on the average, observed a longer normal workweek (39.9).

All of the journeyman trades except the engineers, rodmen, and tile layers had average workweeks of less than 40 hours. The rodmen and tile layers registered averages of exactly 40 hours. The engineers' average was slightly over 40, as a result in most cases, of a 48-hour week on road construction. The plasterers, painters, and paperhangers worked a shorter week, on the average, than did any other trades. A large percentage of their agreements called for 30- and 35-hour weeks.

Among the helper trades, the building laborers, because of the existence of quite numerous 44-hour week schedules, had an average workweek of 40.8 hours. All other helper trades, except tile layers'

helpers, had averages of less than 40. The plasterers' laborers and steam and sprinkler fitters' helpers recorded the low averages, 37.4 and 36.5, respectively. These low averages were brought about, in the main, by the prevalence of the 30-hour week in some localities, over one-fourth of the members operating on that basis.

TABLE 8.—*Distribution of Union Members in Each Building Trade, by Weekly Hours, June 1, 1941*

Trade	Average hours per week	Percent of union members having work week of—					
		30 hours	32 hours	35 hours	40 hours	44 hours	48 hours
All building trades <sup>1</sup> .....	38.8	6.2	0.1	15.6	73.0	4.0	1.0
Journeyman <sup>2</sup> .....	38.5	6.9	( <sup>3</sup> )	16.7	75.1	.6	.6
Asbestos workers <sup>4</sup> .....	38.5	14.0	—	1.5	84.2	—	—
Boilermakers.....	39.1	.3	—	17.0	82.7	—	—
Bricklayers.....	38.2	.7	—	35.4	63.7	.2	—
Carpenters.....	39.2	.2	—	16.5	82.3	1.0	—
Cement finishers.....	39.8	.1	—	11.9	81.8	2.2	4.0
Electrician, inside wiremen.....	38.9	8.0	—	7.5	83.9	.2	.4
Elevator constructors.....	39.9	—	—	8.7	83.7	7.6	—
Engineers, portable and hoisting.....	40.4	1.4	—	.6	91.1	.1	6.8
Glaziers.....	38.7	—	—	28.0	70.6	1.4	—
Granite cutters.....	37.0	—	—	55.5	36.7	—	7.8
Lathers.....	37.5	22.2	—	5.9	71.9	—	—
Machinists.....	39.9	—	—	2.9	97.1	—	—
Marble setters.....	37.7	—	—	45.2	54.6	.2	—
Mosaic and terrazzo workers.....	38.9	—	—	22.4	77.3	.3	—
Painters.....	36.4	20.7	—	31.3	47.7	.3	—
Paperhangers.....	36.1	31.0	—	16.2	51.7	1.1	—
Plasterers.....	35.3	43.9	2.4	3.5	49.9	.3	—
Plumbers and gas fitters.....	38.1	12.7	—	13.0	74.1	.2	—
Rodmen.....	40.0	—	—	.3	99.7	—	—
Roofers, composition.....	39.5	—	—	11.4	85.1	1.0	2.5
Roofers, slate and tile.....	39.7	—	—	10.8	86.0	1.4	1.8
Sheet-metal workers.....	39.4	—	—	12.0	87.8	.2	—
Sign painters.....	39.1	—	—	21.0	75.9	3.1	—
Steam and sprinkler fitters.....	38.5	11.8	—	8.4	78.1	.6	1.1
Stonecutters.....	38.9	—	—	21.4	78.2	.4	—
Stonemasons.....	38.8	.5	—	23.6	75.9	( <sup>5</sup> )	—
Structural-iron workers.....	39.5	3.2	—	3.0	93.8	—	—
Tile layers.....	40.0	.1	—	.3	99.2	.4	—
Helpers and laborers <sup>6</sup> .....	39.9	3.7	—	11.5	65.8	16.3	2.2
Building laborers.....	40.8	( <sup>7</sup> )	—	5.9	69.9	21.7	2.5
Elevator constructors' helpers.....	39.6	—	—	11.3	84.4	4.2	.1
Hod carriers (masons' tenders) <sup>7</sup> .....	38.8	.8	—	33.1	54.1	7.4	3.2
Marble setters' helpers.....	38.1	.5	—	37.8	60.8	.9	—
Plasterers' laborers <sup>8</sup> .....	37.4	28.5	—	1.9	61.1	7.3	—
Steam and sprinkler fitters' helpers.....	36.5	28.3	—	14.8	56.4	—	.5
Tile layers' helpers.....	40.0	.2	—	.2	98.1	1.5	—

<sup>1</sup> Excludes less than a tenth of 1 percent having a 37½-hour week, and less than a tenth of 1 percent having a 42-hour week, and a tenth of 1 percent having a 42½-hour week.

<sup>2</sup> Excludes less than a tenth of 1 percent having a 42-hour week.

<sup>3</sup> Less than a tenth of 1 percent.

<sup>4</sup> Excludes three-tenths of 1 percent having a 42-hour week.

<sup>5</sup> Includes also plumbers' laborers and composition roofers' helpers not shown separately because of the small number of quotations obtained for these trades.

<sup>6</sup> Excludes two-tenths of 1 percent having a 37½-hour week and three-tenths of 1 percent having a 42½-hour week.

<sup>7</sup> Excludes 1.4 percent having a 42½-hour week.

<sup>8</sup> Excludes 1.2 percent having a 42½-hour week.

### Changes in Hours Per Week

The slight upward movement in the 1941 hours index was due primarily to increases where the workweek had been less than 40 hours. The building-trades agreements in Seattle, in general, provided for increases in the previous 30-hour week, while the maximum hours for



most of the trades in Denver were increased from 35 to 40. These changes, together with the other increases, were due to the rush of construction for defense and the rescinding of share-the-work plans.

As indicated in table 9, the great majority of the quotations (92 percent), and membership (95 percent), maintained the same maximum weekly hours as in 1940. Proportionately, a greater number of journeymen (96 percent) than of helpers (94 percent) observed the same working schedule. Of the 3,124 comparable quotations, 94 called for increased weekly hours and 144 reported decreases. Almost twice as many journeymen were affected by increases in the workweek as by decreases. For helpers the proportion was practically even.

TABLE 9.—Number of Changes in Union Hour Quotations and Percent of Members Affected, June 1, 1941, Compared with June 1, 1940

Trade	Number of quotations comparable with 1940	Number of quotations showing—			Percentage of union members affected—		
		Increase	Decrease	No change	Increase	Decrease	No change
All building trades.....	3,124	94	144	2,886	2.9	1.8	95.3
Journeymen.....	2,551	75	105	2,371	2.8	1.5	95.7
Asbestos workers.....	65	3	1	61	2.6	.8	96.6
Boilermakers.....	47			47			100.0
Bricklayers.....	82	4	1	77	1.7	.3	98.0
Carpenters.....	122	5	2	115	3.2	1.1	95.7
Cement finishers.....	76	3	5	68	4.6	2.9	92.5
Electricians, inside wiremen.....	96	6	3	87	4.0	1.7	94.3
Elevator constructors.....	127	2	14	111	1.2	4.9	93.9
Engineers, portable and hoisting.....	408	8	31	369	3.4	6.1	90.5
Glaziers.....	73	2	3	68	2.8	.8	96.4
Granite cutters.....	27			27			100.0
Lathers.....	90	5	2	83	5.4	.9	93.7
Machinists.....	34		2	32		1.0	99.0
Marble setters.....	70	2	1	67	1.3	.2	98.5
Mosaic and terrazzo workers.....	66	2	1	63	2.2	.7	97.1
Painters.....	134	3	13	118	1.9	2.0	96.1
Paperhangers.....	71	2	4	65	3.1	1.4	95.5
Plasterers.....	81	2	3	76	2.0	.5	97.5
Plumbers and gas fitters.....	87	2	2	83	2.7	1.3	96.0
Rodmen.....	71	2		69	4.7		95.3
Roofers, composition.....	105	5	5	95	2.5	1.3	96.2
Roofers, slate and tile.....	63	2	3	58	1.0	2.0	97.0
Sheet-metal workers.....	67	3	1	63	3.8	.3	95.9
Sign painters.....	72	1	3	68	2.1	4.3	93.6
Steam and sprinkler fitters.....	112	5	2	105	3.4	.5	96.1
Stonecutters.....	80		1	79		13.1	86.9
Stonemasons.....	73	2	1	70	.7	.2	99.1
Structural-iron workers.....	78	2		76	2.4		97.6
Tile layers.....	74	2	1	71	2.6	.1	97.3
Helpers and laborers.....	573	19	39	515	3.2	3.1	93.7
Building laborers.....	85	5	7	73	4.1	2.8	93.1
Composition roofers' helpers.....	30	2	2	26	6.7	4.9	88.4
Elevator constructors' helpers.....	95	2	7	86	2.0	2.2	95.8
Hod carriers (masons' tenders).....	95	2	10	83	1.2	3.9	94.9
Marble setters' helpers.....	48	2		46	1.9		98.1
Plasterers' laborers.....	75	3	6	66	3.8	3.2	93.0
Plumbers' laborers.....	41	1	5	35	.4	6.4	93.2
Steam and sprinkler fitters' helpers.....	54		1	53		.3	99.7
Tile layers' helpers.....	50	2	1	47	2.5	.8	96.7

The boilermakers and granite cutters were the only trades in which all the hour scales remained the same as in 1940. In addition to these two, the machinists, stonecutters, and steam and sprinkler



fitters' helpers were the only trades which did not report any increases in maximum hours. All others except sign painters and plumbers' laborers reported at least two quotations with lengthened hour schedules.

Reduced hours were reported for small percentages of most of the journeymen and helpers, with the exception of the stonecutters, where slightly over 13 percent of the members were affected. All of these members belong to the same local in New York City. All the trades except the boilermakers, granite cutters, rodmen, structural-iron workers and marble setters' helpers had some quotations with reduced hours of work.

### *Overtime Rates*

Double time was reported as the initial overtime rate in a majority of the quotations in all building trades, covering 60 percent of the union members included in the survey.<sup>6</sup> Practically all of the other members were covered by an overtime rate of time and a half. In many instances, when the initial overtime rate was listed as time and a half, the extra hours permitted at this rate were limited, after which double time went into effect. Only 18 of a total of 3,326 quotations provided for overtime rates other than those mentioned above; in 14 of these no penalty rate was included, initial overtime being paid for at the regular rate, and the 4 other quotations reported that overtime was prohibited. (See table 10.)

About 55 percent of the journeyman quotations, including over 71 percent of the members, stipulated an overtime rate of twice the regular hourly wage. In contrast, the helper groups indicated the time and a half rate for about 79 percent of the members covered, including 61 percent of the quotations.

The structural-iron workers and rodmen observed an almost universal overtime rate of double time, as almost 98 percent of them were covered by agreements with this specification. In three other trades—boilermakers, elevator constructors, and plasterers—90 percent of the membership received double rates for overtime. In a half dozen journeyman trades—the glaziers, painters, paperhangers, sign painters, composition roofers, and slate and tile roofers—time and a half was more usual. A substantial majority of the cement finishers and stonecutters reported overtime at time and a half, but these quotations covered only small proportions of the members. This condition is explained by the fact that, usually, only the larger locals have obtained the double-time rate. The elevator constructors' helpers and steam fitters' helpers are the only helper and laborer trades that follow

<sup>6</sup> On July 22, 1941, the Building and Construction Trades Department of the American Federation of Labor entered into an agreement with the Office of Production Management covering certain labor policies in defense construction. Article 1 provided that all overtime on defense construction shall be paid on a basis of time and a half. Since this agreement was made after June 1, the date of the survey, it had no effect on the findings shown in this article.

the general pattern of the journeymen in respect to overtime. Almost 97 percent of the elevator constructors' helpers and 89.5 percent of the steam and sprinkler fitters' helpers received double time for work in excess of the regular hours. The marble setters' helpers, tile layers' helpers and plumbers' laborers also had a majority of their members receiving the double rate, most of them being in the larger locals.

TABLE 10.—Overtime Rates Provided in Building-Trades Union Agreements, June 1, 1941

Trade	Number of quotations showing initial overtime rates of—				Percentage of union members having initial overtime rates of—			
	Time and a half	Double time	Overtime prohibited	No penalty rate specified	Time and a half	Double time	Overtime prohibited	No penalty rate specified
All building trades.....	1,588	1,720	4	14	39.5	60.4	(1)	0.1
Journeymen.....	1,210	1,485	4	12	28.8	71.1	(1)	.1
Asbestos workers.....	31	38			26.8	73.2		
Boilermakers.....	8	44			7.5	92.5		
Bricklayers.....	21	63			10.8	89.2		
Carpenters.....	57	72		2	20.6	79.4		(1)
Cement finishers.....	50	35		1	46.0	53.1		.9
Electricians, inside wiremen.....	36	59		1	34.3	65.1		.6
Elevator constructors.....	30	97			9.0	91.0		
Engineers, portable and hoisting.....	210	252			38.3	61.7		
Glaziers.....	63	14			54.3	45.7		
Granite cutters.....	13	16			20.7	79.3		
Lathers.....	14	76		4	14.1	81.0		4.9
Machinists.....	16	21			11.1	88.9		
Marble setters.....	28	44			23.0	77.0		
Mosaic and terrazzo workers.....	32	35			44.4	55.6		
Painters.....	124	28	1		57.7	42.3	(1)	
Paperhangers.....	64	12			80.0	20.0		
Plasterers.....	23	63			8.8	91.2		
Plumbers and gas fitters.....	25	64			19.3	80.7		
Rodmen.....	1	70			2.1	97.9		
Roofers, composition.....	86	27		1	71.1	28.1		.8
Roofers, slate and tile.....	45	21		1	65.9	33.7		.4
Sheet-metal workers.....	15	56			14.4	85.6		
Sign painters.....	66	7			69.5	30.5		
Steam and sprinkler fitters.....	34	82			30.7	69.3		
Stonecutters.....	55	21	3	2	30.9	66.7	1.6	.8
Stonemasons.....	23	52			16.2	83.8		
Structural-iron workers.....	2	77			1.3	98.7		
Tile layers.....	38	39			36.8	63.2		
Helpers and laborers.....	378	235		2	78.9	21.0		.1
Building laborers.....	82	10		2	87.1	12.8		.1
Composition roofers' helpers.....	22	11			78.3	21.7		
Elevator constructors' helpers.....	17	78			3.5	96.5		
Hod carriers (mason's tenders).....	88	19			86.7	13.3		
Marble setters' helpers.....	35	18			33.3	66.7		
Plasterers' laborers.....	53	25			60.5	39.5		
Plumbers' laborers.....	26	17			37.5	62.5		
Steam and sprinkler fitters' helpers.....	17	42			10.5	89.5		
Tile layers' helpers.....	38	15			44.4	55.6		

<sup>1</sup> Less than a tenth of 1 percent.

### Sunday Rates

Nine of every 10 union members were covered by agreements stipulating a rate of double time for work on Sundays (see table 11). This provision was carried in 88 percent of the quotations for all trades. A slightly greater proportion of the helper and laborer membership than of the journeyman membership was covered by double-time rates for Sunday work. Time and a half rates were

specified in practically all of the other quotations. Only 19 out of 3,326 quotations, covering about a tenth of 1 percent of the members, quoted other Sunday scales.

The bricklayers, stonemasons, rodmen, and structural-iron workers reported double time in all their quotations. The boilermakers, cement finishers, elevator constructors, engineers, granite cutters, machinists, marble setters, and plumbers had majorities of at least 98 percent of the members on the double-time standard. In addition to the 12 trades already mentioned, 7 others provided double time for a greater percentage of members than the average (90.6 percent) for all trades. Only the steam and sprinkler fitters (78.1 percent), painters (62.9 percent), and paperhangers (53.3 percent) had less than 80 percent of the members covered by double-time rates.

TABLE 11.—Sunday Rates Provided in Building-Trades Union Agreements, June 1, 1941

Trade	Number of quotations showing Sunday rates of—				Percentage of union members having Sunday rates of—			
	Time and a half	Double time	Sunday work prohibited	No penalty rate specified	Time and a half	Double time	Sunday work prohibited	No penalty rate specified
All building trades.....	359	2,948	7	12	9.3	90.6	(1)	0.1
Journeyman.....	301	2,393	7	10	10.0	89.9	(1)	.1
Asbestos workers.....	21	48			19.2	80.8		
Boilermakers.....	4	48			1.6	98.4		
Bricklayers.....		84				100.0		
Carpenters.....	11	119		1	2.7	97.3	(1)	
Cement finishers.....	5	81			1.6	98.4		
Electricians, inside wiremen.....	15	81			17.8	82.2		
Elevator constructors.....	3	124			.4	99.6		
Engineers, portable and hoisting.....	35	427			1.7	98.3		
Glaziers.....	22	55			11.4	88.6		
Granite cutters.....		27	2			99.0	1.0	
Lathers.....	4	85		5	.9	89.7		9.4
Machinists.....	2	35			1.2	98.8		
Marble setters.....	4	68			2.0	98.0		
Mosaic and terrazzo workers.....	5	62			5.6	94.4		
Painters.....	61	91	1		37.1	62.9	(1)	
Paperhangers.....	29	47			46.7	53.3		
Plasterers.....	9	77			3.3	96.7		
Plumbers and gas fitters.....	6	83			1.5	98.5		
Rodmen.....		71				100.0		
Roofers, composition.....	15	98	1		10.6	89.2	.2	
Roofers, slate and tile.....	8	58	1		8.0	91.4	.6	
Sheet-metal workers.....	3	68			7.6	92.4		
Sign painters.....	18	54		1	13.5	86.0		.5
Steam and sprinkler fitters.....	11	105			21.9	78.1		
Stonecutters.....	7	69	2	3	6.2	91.4	.4	2.0
Stonemasons.....		75				100.0		
Structural-iron workers.....		79				100.0		
Tile layers.....	3	74			2.2	97.8		
Helpers and laborers.....	58	555		2	6.5	93.4		.1
Building laborers.....	13	79		2	7.0	92.9		.1
Composition roofers' helpers.....	3	30			4.8	95.2		
Elevator constructors' helpers.....		95				100.0		
Hod carriers (masons' tenders).....	15	92			6.7	93.3		
Marble setters' helpers.....	6	47			3.4	96.6		
Plasterers' laborers.....	8	70			5.7	94.3		
Plumbers' laborers.....	4	39			5.1	94.9		
Steam and sprinkler fitters' helpers.....	2	57			.5	99.5		
Tile layers' helpers.....	7	46			5.3	94.7		

<sup>1</sup> Less than a tenth of 1 percent.



All trades in the helper group reported double time for over 90 percent of their members. All elevator constructors' helpers and practically all steam and sprinkler fitters' helpers were listed on the double-time basis. The building laborers and hod carriers reported the largest proportion (7.0 and 6.7 percent) under time and a half rates for Sunday work.

### *Trends in Individual Trades*

*Wage rates.*—Each of the trades appearing in table 12 showed an increase in the index of hourly wage rates for the period June 1, 1940, to June 1, 1941. Most marked of the increases was that attained by the painters who were successful in raising their rates by an average of 6.6 percent over 1940; building laborers improved their rates by 5.9 percent. A 4-percent gain was made by the electricians, plumbers, composition roofers, sheet-metal workers, and structural-iron workers. Those trades whose index advanced the least were the marble setters and mosaic and terrazzo workers; both of these reported increases of less than 1 percent.

Compared to the base year, 1929, the steam and sprinkler fitters' helpers have made the greatest gains in wage rates as indicated by their index of 125.2. Five other trades have increased their rates by over 20 percent—engineers, lathers, plumbers, composition roofers, and building laborers. Only the sign painters and stonecutters remain below their 1929 levels.

*Maximum weekly hours.*—Twenty-three of the 31 trades for which indexes are shown in table 12 had their average regular weekly hours increased in 1941. The increases in each case were slight, none amounting to as much as 1 percent over 1940. The lathers reported the greatest increase (nine-tenths of 1 percent). Of the other 8 trades, 4 showed decreases in their hour indexes, while 4 remained constant. The stonecutters reported the greatest decrease (1.7 percent). Others showing a lower figure for 1941 were elevator constructors, engineers, and hod carriers. Those whose indexes showed no change from 1940 were the sign painters, slate and tile roofers, granite cutters, and steam and sprinkler fitters' helpers. The granite cutters have shown no change in maximum weekly hours for the past 4 years.

In comparison with 1929 all indexes of hours have decreased, with the tile layers' helpers showing the greatest reduction (18.1 percent) closely followed by the steam and sprinkler fitters' helpers (17.8 percent). Among the journeymen, the lathers have decreased their average workweek by approximately 14 percent since 1929. Of all the trades the hod carriers have had the smallest reduction (7 percent) followed by the slate and tile roofers (8 percent).



TABLE 12.—Indexes of Union Hourly Wage Rates and Weekly Hours in Each Building Trade, 1907 to 1941

[1929=100]

Year	Asbestos workers		Bricklayers		Carpenters		Cement finishers		Electricians (inside wiremen)		Elevator constructors	
	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours
1907			37.9	112.0	32.0	107.2	38.5	109.1	31.3	110.3		
1908			38.9	109.6	34.0	105.6	38.4	108.1	34.2	109.5		
1909			39.7	107.3	35.9	104.4	39.6	108.9	35.3	108.8		
1910			40.4	105.3	37.6	103.1	40.0	108.7	36.3	108.2		
1911			40.4	104.9	38.1	102.6	41.5	107.7	36.7	108.0		
1912			41.0	104.9	38.9	102.5	41.5	107.7	37.1	107.6		
1913			41.7	104.7	39.5	102.4	42.5	106.5	37.9	107.2		
1914			42.8	104.2	40.1	102.0	42.9	105.8	39.1	106.8	41.8	102.7
1915			42.9	104.1	40.6	102.0	43.3	105.8	39.9	106.2	42.1	102.2
1916	40.0	103.0	43.3	103.9	41.8	102.0	43.7	104.2	40.7	105.3	43.1	102.1
1917	42.1	102.6	44.8	103.6	45.5	102.0	46.2	103.0	43.3	104.9	46.2	101.6
1918	47.1	102.0	48.1	103.6	50.5	100.9	51.0	102.5	48.2	104.2	49.2	101.6
1919	57.3	101.0	53.4	103.4	58.2	100.3	57.2	101.7	55.2	103.3	57.3	100.9
1920	74.5	100.9	72.8	103.3	77.8	100.4	77.7	101.2	72.8	103.0	73.6	100.8
1921	75.5	101.1	72.3	103.3	78.4	100.3	80.3	101.2	75.4	103.0	77.4	100.7
1922	70.3	101.1	70.4	103.3	72.7	100.4	74.5	101.1	71.1	103.0	72.4	100.4
1923	72.9	100.9	79.7	103.3	81.0	100.7	81.5	101.1	73.8	103.0	76.9	100.5
1924	81.4	101.0	84.3	103.2	86.7	100.6	90.1	101.1	82.4	102.9	86.3	100.5
1925	84.6	101.0	89.2	103.1	88.5	100.6	90.6	100.8	86.7	102.9	90.5	100.4
1926	90.5	101.0	94.7	103.2	95.0	100.6	96.7	100.8	91.3	102.9	95.3	100.4
1927	95.0	100.9	97.0	102.7	98.1	100.6	101.0	100.5	95.1	102.9	98.8	100.4
1928	95.6	100.9	97.8	102.7	98.4	100.0	100.0	99.9	96.0	102.4	99.8	100.4
1929	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1930	105.8	96.3	102.4	97.6	104.0	96.9	106.6	96.1	101.8	97.6	104.7	96.8
1931	106.8	94.0	102.2	96.1	104.2	95.4	107.0	95.0	103.2	96.6	105.2	95.0
1932	89.0	92.8	87.5	93.9	85.4	93.0	93.4	93.9	98.5	94.3	97.9	95.0
1933	88.7	91.8	85.2	94.9	85.2	91.6	91.2	95.7	89.9	94.3	91.0	93.0
1934	88.6	91.7	84.5	93.3	86.7	90.8	92.1	92.2	90.1	88.7	91.2	92.2
1935	89.8	91.0	84.2	93.2	87.8	90.4	92.6	92.0	94.4	85.1	91.3	91.9
1936	93.4	91.3	84.7	93.2	92.3	90.5	95.0	91.6	96.9	85.4	92.4	92.6
1937	100.6	91.0	90.6	94.1	98.3	90.3	101.9	91.7	101.1	89.6	96.0	92.4
1938	110.3	89.5	100.1	91.0	107.1	88.6	111.3	88.9	111.4	89.1	107.7	91.7
1939	110.8	89.5	100.6	91.1	107.3	88.6	111.7	88.9	112.0	88.8	109.5	89.5
1940	112.0	89.0	102.8	90.8	110.0	88.6	112.7	89.1	113.9	88.8	111.2	89.1
1941	116.1	89.5	105.2	91.0	112.5	89.1	116.7	89.5	119.1	89.3	113.7	88.9

TABLE 12.—Indexes of Union Hourly Wage Rates and Weekly Hours in Each Building Trade, 1907 to 1941—Continued

[1929=100]

Year	Engineers (portable and hoisting)		Glaziers		Granite cutters		Lathers		Marble setters		Mosaic and terrazzo workers	
	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours
1907					36.6	102.5			38.4	102.6		
1908					36.8	102.3			38.8	102.6		
1909					37.4	102.3			39.0	101.5		
1910					37.6	101.9			39.5	101.3		
1911					37.7	101.6			39.9	100.9		
1912	41.8	105.6			38.1	101.2	39.4	104.0	40.1	100.9		
1913	43.0	104.1			40.1	100.0	40.3	104.0	42.7	100.9		
1914	43.6	104.0			40.3	100.4	41.0	104.0	43.2	100.7		
1915	43.6	103.5			40.5	100.4	41.5	103.5	43.6	100.7		
1916	44.1	103.1			42.2	100.3	42.7	103.5	43.8	100.5	37.7	103.9
1917	46.5	102.4			43.8	100.3	44.4	103.0	43.8	100.4	39.7	103.9
1918	53.2	100.8	45.9	101.6	52.2	100.3	47.9	103.0	46.1	100.4	42.9	100.2
1919	58.3	100.3	49.1	101.6	61.7	100.3	53.3	102.7	51.2	100.0	46.1	100.2
1920	75.5	99.8	71.0	101.2	76.0	100.3	76.0	102.1	67.7	100.0	68.2	100.2
1921	76.7	99.4	72.2	101.6	83.7	100.1	77.2	101.9	68.8	100.1	69.4	100.2
1922	72.2	99.1	72.4	101.7	83.5	99.3	72.5	102.0	67.4	100.1	67.4	100.2
1923	79.8	98.7	76.7	101.2	85.1	99.9	80.1	102.3	76.2	100.1	69.0	100.2
1924	84.8	98.7	80.9	101.2	85.8	100.2	86.4	102.1	79.7	100.1	81.5	100.3
1925	88.5	99.0	90.0	100.8	86.8	100.3	94.2	101.8	81.4	100.1	85.7	100.2
1926	93.4	99.2	91.2	101.2	97.7	100.1	96.6	101.5	91.0	100.1	87.5	100.2
1927	96.4	100.8	97.4	101.5	97.1	100.3	100.5	101.0	92.9	100.0	91.1	99.9
1928	100.4	99.7	98.5	101.1	98.2	100.3	100.8	100.5	93.4	100.0	95.3	99.9
1929	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1930	107.7	95.1	104.6	96.8	105.1	95.2	104.3	94.3	100.3	94.7	104.7	94.5
1931	107.7	93.7	105.3	95.1	105.2	94.4	103.7	93.8	100.8	93.0	105.6	93.6
1932	100.7	92.6	88.2	92.9	94.2	94.8	93.1	93.3	92.3	92.0	97.2	89.8
1933	99.6	91.7	88.0	92.9	90.7	93.6	89.7	92.9	89.2	91.9	89.5	91.0
1934	101.4	89.7	93.2	88.1	90.6	92.1	92.1	87.5	88.8	90.9	90.8	90.9
1935	103.1	89.2	94.1	87.5	90.5	92.1	93.1	87.4	89.4	90.9	90.8	90.3
1936	104.2	89.7	95.5	87.8	90.5	91.5	95.5	86.5	89.9	90.8	91.1	89.4
1937	112.6	89.5	104.6	87.9	91.0	91.9	101.8	87.7	95.1	90.8	95.4	90.0
1938	116.0	89.3	112.2	86.3	96.3	85.3	112.7	86.1	103.2	90.8	106.0	87.7
1939	117.4	89.2	113.0	86.1	97.7	85.3	116.4	85.4	103.5	90.8	107.5	87.7
1940	118.4	89.1	114.3	86.1	97.7	85.3	117.2	85.2	105.2	86.7	108.0	87.7
1941	122.2	88.8	117.9	86.6	101.1	85.3	121.6	86.0	105.5	86.9	109.0	88.0

TABLE 12.—Indexes of Union Hourly Wage Rates and Weekly Hours in Each Building Trade, 1907 to 1941—Continued

[1920=100]

Year	Painters		Plasterers		Plumbers and gas fitters		Roofers—composition		Roofers—slate and tile		Sheet-metal workers	
	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours
1907.....	27.5	114.1	39.9	108.8	37.8	104.7	-----	-----	-----	-----	33.8	105.4
1908.....	30.5	112.3	39.8	108.3	38.2	104.8	-----	-----	-----	-----	34.5	105.3
1909.....	32.6	110.7	40.1	108.3	38.8	104.8	-----	-----	-----	-----	34.7	105.3
1910.....	34.6	109.3	40.5	108.2	39.1	104.6	-----	-----	-----	-----	35.7	105.3
1911.....	35.3	108.6	40.8	108.8	41.4	104.3	-----	-----	-----	-----	36.8	105.0
1912.....	35.7	108.5	41.6	107.5	41.6	103.5	-----	-----	-----	-----	37.6	103.7
1913.....	37.3	107.9	42.0	107.5	43.0	103.5	-----	-----	-----	-----	39.3	103.5
1914.....	38.5	107.6	42.2	107.4	43.6	103.1	36.2	103.7	37.0	104.0	40.7	103.4
1915.....	38.7	107.6	42.4	106.9	43.9	103.1	37.1	103.7	38.4	104.0	41.3	103.2
1916.....	42.3	106.9	43.9	105.8	44.3	102.6	37.4	103.7	39.5	103.6	42.0	102.8
1917.....	43.6	106.8	45.2	105.7	45.8	102.5	39.5	103.0	42.1	101.8	43.8	102.7
1918.....	48.1	106.3	47.6	105.4	50.6	101.6	44.8	102.5	46.1	101.8	51.3	101.6
1919.....	56.3	106.1	54.9	105.4	57.2	101.3	49.8	102.5	52.5	101.5	56.6	101.2
1920.....	76.7	103.0	71.7	105.2	74.0	101.3	70.8	102.5	67.9	101.5	75.9	100.8
1921.....	78.9	103.1	75.6	104.9	77.4	101.1	74.2	100.6	73.9	101.4	78.7	100.8
1922.....	73.8	103.9	72.7	105.0	71.9	101.1	71.0	100.6	70.7	101.3	73.0	100.7
1923.....	81.0	103.6	81.0	105.5	79.4	101.1	71.9	100.6	78.8	101.6	78.6	100.7
1924.....	85.3	103.5	90.6	105.6	86.6	101.1	83.3	100.6	87.3	101.2	86.3	100.7
1925.....	90.0	103.8	92.1	105.3	88.4	101.1	85.8	100.6	91.3	101.2	89.2	100.7
1926.....	95.4	103.4	98.9	102.2	95.2	101.1	93.3	100.6	94.3	101.2	95.3	100.7
1927.....	98.6	103.0	101.0	101.8	97.2	100.9	95.9	100.6	98.8	101.2	98.2	100.4
1928.....	100.2	100.3	101.2	100.9	99.2	100.9	98.1	100.5	99.0	101.2	96.3	100.1
1929.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1930.....	105.6	98.9	105.0	97.7	103.9	95.4	106.0	96.1	103.1	95.7	104.6	96.3
1931.....	106.1	98.0	104.7	97.0	105.1	94.1	106.7	94.9	103.5	94.1	106.2	94.7
1932.....	89.6	97.9	87.1	95.2	91.4	93.7	93.2	93.9	89.9	94.1	92.1	93.3
1933.....	87.8	97.7	83.7	97.2	90.6	93.3	91.2	95.1	87.7	94.1	89.4	93.2
1934.....	86.4	85.6	84.6	93.1	91.4	92.4	93.0	92.6	87.2	93.8	89.7	91.9
1935.....	86.7	85.5	85.6	91.6	92.8	91.8	95.6	92.5	89.5	92.6	90.4	92.0
1936.....	91.1	85.9	86.1	90.1	95.2	90.6	96.2	93.1	90.2	93.4	92.2	91.9
1937.....	97.7	85.9	94.9	90.2	100.4	91.1	103.7	93.2	96.9	93.3	98.9	92.0
1938.....	104.2	86.0	106.1	86.5	112.5	86.5	114.8	91.5	103.4	92.2	108.8	90.1
1939.....	105.0	85.7	107.0	86.5	113.5	86.8	115.2	91.6	104.4	92.2	110.4	90.1
1940.....	105.2	86.1	107.5	86.3	115.3	85.9	117.9	91.2	106.2	92.1	112.4	90.1
1941.....	112.2	86.3	109.4	86.6	120.3	86.3	122.7	91.9	108.6	92.1	117.6	90.8

TABLE 12.—Indexes of Union Hourly Wage Rates and Weekly Hours in Each Building Trade, 1907 to 1941—Continued

[1929=100]

Year	Sign painters		Steam and sprinkler fitters		Stonecutters		Stonemasons		Structural- iron workers <sup>1</sup>		Tile layers	
	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours
1907.....			33.8	105.9	38.1	101.2	34.7	106.8	31.8	108.1		
1908.....			34.2	105.9	38.2	101.2	35.2	106.8	34.7	105.9		
1909.....			38.9	105.6	38.2	101.2	35.3	106.8	37.2	104.5		
1910.....			36.1	105.0	38.4	101.2	35.6	105.2	39.5	103.4		
1911.....			37.3	104.9	38.5	101.2	36.0	104.5	40.5	103.2		
1912.....			37.9	104.2	38.6	100.9	36.4	104.5	41.2	102.1	42.7	102.8
1913.....	39.9	106.7	39.3	103.8	39.6	100.8	37.6	104.4	42.5	101.7	44.8	102.3
1914.....	40.1	106.3	40.0	102.5	41.1	100.8	38.7	104.4	43.3	101.5	45.0	102.3
1915.....	40.1	106.0	40.9	102.5	41.4	100.8	39.1	104.3	43.3	101.5	45.3	101.9
1916.....	40.9	106.1	41.7	102.2	41.8	100.4	39.7	104.1	44.0	101.2	45.9	101.4
1917.....	42.7	105.6	43.3	102.1	43.8	100.3	41.2	104.0	46.6	101.0	48.2	101.1
1918.....	46.7	105.5	47.3	101.1	46.7	100.3	45.2	104.0	53.4	100.7	49.6	101.1
1919.....	56.1	105.4	53.2	101.0	55.5	100.3	50.7	103.4	60.1	100.5	54.1	100.7
1920.....	75.7	105.3	70.2	100.9	72.7	100.2	70.7	103.4	76.2	100.5	72.8	100.4
1921.....	78.5	105.4	71.1	100.8	74.7	100.2	72.4	103.5	77.6	100.5	72.2	100.5
1922.....	77.8	105.4	69.5	100.8	71.7	100.2	67.4	103.4	70.5	100.5	71.0	100.3
1923.....	84.0	103.4	72.9	100.8	78.2	100.1	79.7	103.4	75.1	100.5	77.6	100.6
1924.....	95.7	101.6	83.6	100.8	84.0	100.1	84.5	103.1	85.0	100.5	88.1	100.6
1925.....	96.7	101.6	88.0	100.8	87.5	100.3	86.1	103.1	85.9	100.2	90.2	100.6
1926.....	96.2	103.7	95.3	100.7	95.4	100.1	94.9	103.3	92.4	100.5	94.6	100.6
1927.....	98.9	101.8	98.0	100.5	95.1	100.1	96.1	103.1	99.0	100.5	99.0	100.5
1928.....	99.0	101.7	99.4	100.5	95.5	100.2	97.3	103.0	99.2	100.4	98.9	100.2
1929.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1930.....	99.9	99.1	104.9	95.5	100.7	96.9	101.5	96.6	105.5	96.9	104.5	94.8
1931.....	99.8	98.1	105.5	94.5	101.0	96.4	102.0	94.9	106.5	95.8	105.6	93.6
1932.....	90.1	97.6	90.9	93.6	93.7	94.3	90.5	94.5	92.3	93.4	91.1	92.6
1933.....	83.2	97.8	88.2	93.1	84.7	94.3	84.5	93.8	91.3	93.1	88.3	92.4
1934.....	82.9	95.1	89.2	92.5	85.1	93.0	84.4	93.4	92.5	91.8	88.3	86.2
1935.....	85.6	93.1	90.7	92.2	85.1	92.7	84.2	93.3	93.2	90.7	89.0	86.2
1936.....	87.6	92.9	93.7	92.4	86.3	92.8	85.2	93.3	95.6	90.6	90.7	86.1
1937.....	96.8	92.9	98.8	92.5	88.3	92.8	94.1	93.3	104.4	90.2	97.1	89.8
1938.....	97.7	92.0	111.4	87.6	96.1	91.7	102.1	90.2	112.7	89.2	106.4	89.8
1939.....	97.9	91.9	112.2	88.0	96.5	91.8	102.4	90.2	114.0	89.1	106.5	89.8
1940.....	98.1	92.1	112.5	88.0	96.8	91.7	101.9	90.1	114.4	89.1	106.7	89.8
1941.....	99.8	92.1	116.0	88.5	98.5	90.2	104.5	90.2	119.9	89.5	108.2	90.2

<sup>1</sup> Included rodmen prior to 1940.



TABLE 12.—Indexes of Union Hourly Wage Rates and Weekly Hours in Each Building Trade, 1907 to 1941—Continued

[1929=100]

Year	Building laborers		Hod carriers (masons' tenders)		Plasterers' laborers		Elevator constructors' helpers		Marble setters' helpers		Steam and sprinkler fitters' helpers		Tile layers' helpers	
	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours
1907	35.0	108.5	33.1	110.5	34.1	106.6	---	---	---	---	26.4	103.1	---	---
1908	35.2	108.5	33.2	110.5	35.6	106.2	---	---	---	---	26.8	103.0	---	---
1909	35.3	108.1	33.3	110.1	36.0	105.9	---	---	---	---	26.9	102.8	---	---
1910	36.7	105.5	33.8	109.2	36.2	105.9	---	---	---	---	29.1	101.8	---	---
1911	36.8	105.5	34.1	108.6	36.2	105.8	---	---	---	---	29.3	101.7	---	---
1912	37.2	105.5	34.3	107.8	36.6	105.3	---	---	35.8	100.5	30.2	101.6	36.1	103.0
1913	38.8	105.5	34.8	107.8	37.5	105.3	---	---	37.9	100.5	31.0	101.3	36.8	102.5
1914	39.2	105.2	35.2	106.4	38.3	105.4	37.5	102.9	38.1	100.1	31.6	102.0	37.1	102.5
1915	39.4	105.2	35.4	106.4	38.4	105.4	37.8	102.2	38.1	100.1	32.5	102.0	38.4	100.9
1916	41.2	104.6	36.5	106.4	39.4	104.4	38.8	102.2	38.1	100.1	33.0	101.7	39.8	100.6
1917	45.5	103.5	40.7	106.3	42.1	104.2	40.9	101.7	40.6	100.1	35.1	101.7	40.8	99.8
1918	53.4	103.0	47.5	106.3	48.5	104.2	43.6	101.7	42.5	100.1	40.5	100.3	42.1	99.8
1919	60.5	101.1	55.6	105.9	55.3	103.8	52.9	100.9	48.6	100.0	48.6	100.2	51.0	99.5
1920	87.7	100.0	80.8	105.7	80.1	103.8	74.1	100.7	82.0	100.0	70.4	100.2	83.5	90.5
1921	88.2	100.0	81.2	105.7	82.7	103.4	77.5	100.5	81.9	100.2	72.2	100.2	84.4	90.6
1922	82.8	99.3	67.3	105.9	72.6	103.4	73.8	100.6	76.2	100.2	74.1	100.3	79.3	99.6
1923	84.4	100.0	73.5	105.9	80.0	103.5	77.3	100.6	82.3	100.2	78.7	100.3	81.1	100.5
1924	93.9	99.7	76.8	105.8	86.0	103.4	85.2	100.6	89.2	100.2	87.2	100.3	88.3	100.5
1925	89.7	99.8	85.8	105.7	91.7	103.3	89.2	100.5	84.6	100.2	89.7	100.3	90.8	100.5
1926	98.7	100.0	93.5	105.8	97.1	99.9	96.1	100.5	93.9	100.2	95.0	100.2	98.4	100.5
1927	99.1	100.2	95.7	105.8	98.0	99.8	99.0	100.5	93.3	100.0	99.3	100.4	99.5	100.5
1928	99.5	100.1	95.8	105.8	99.6	100.1	100.9	100.5	94.3	100.1	101.4	100.0	101.5	100.5
1929	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1930	105.5	98.1	103.8	99.3	106.0	97.4	105.4	96.2	101.7	95.9	109.3	92.1	108.5	93.6
1931	103.9	97.0	103.5	98.8	105.6	96.6	105.7	94.7	101.8	94.2	109.3	91.8	108.5	92.6
1932	89.4	93.6	85.8	96.6	87.6	96.3	96.9	94.7	93.2	93.8	94.3	91.7	95.8	91.4
1933	84.2	93.2	84.7	96.1	82.5	94.7	88.9	92.5	90.7	94.0	91.6	91.6	91.4	91.5
1934	87.3	89.1	90.3	94.3	84.8	91.8	88.4	91.8	90.9	92.3	91.9	91.1	91.5	87.6
1935	88.6	89.0	87.4	94.2	86.2	90.7	88.6	91.5	91.5	92.3	93.0	91.1	94.6	76.3
1936	96.2	89.5	92.1	94.0	88.0	89.2	89.5	92.1	91.6	92.2	93.2	91.5	96.0	76.3
1937	105.3	89.7	99.1	94.3	95.8	89.2	91.8	91.7	97.0	92.2	100.0	91.8	101.2	81.6
1938	112.9	89.3	109.1	93.2	108.1	85.1	104.5	91.1	105.4	92.2	121.8	82.3	111.6	81.6
1939	113.6	89.2	109.4	92.9	109.0	84.8	107.9	86.8	105.9	92.2	122.5	82.2	111.9	81.6
1940	115.4	88.7	113.6	92.8	109.2	84.5	108.9	86.6	108.2	88.3	123.2	82.2	112.1	81.6
1941	122.2	88.9	117.4	92.7	111.7	84.8	111.0	86.8	109.8	88.6	125.2	82.2	114.7	81.9

Rate Changes in Specified Trades

Since data for boilermakers, machinists, paperhangers, and rodmen were not collected in 1929, it was impossible to present index numbers for these crafts or to include them in the trend discussion above, since it is based upon the changes in the index numbers. The changes over the previous years, as shown in comparable quotations for each year in which data have been collected for these trades, however, are shown in table 13.

TABLE 13.—Percent of Change in Union Hourly Wage Rates and Weekly Hours in Specified Building Trades, 1936 to 1941

Item	Percent of change from previous year				
	1937	1938	1939	1940	1941
Boilermakers:					
Hourly wage rates.....	+2.4	+10.4	+0.6	+1.5	+1.9
Weekly hours.....	-.1	-5.0	0.0	0.0	+.5
Machinists:					
Hourly wage rates.....	+14.7	+6.5	+.2	+.4	+2.8
Weekly hours.....	-.4	-.5	-.1	0.0	-.2
Paperhangers:					
Hourly wage rates.....		+1.7	+.5	+.8	+6.7
Weekly hours.....		-.6	+.2	+.3	+.5
Rodmen:					
Hourly wage rates.....		+9.8	+1.0	+1.2	+5.1
Weekly hours.....		0.0	-.1	0.0	+1.0

EARNINGS AND HOURS IN RICE MILLS, 1941<sup>1</sup>*Summary*

AVERAGE hourly earnings of workers in the rice cleaning and polishing industry during January and February 1941 amounted to 36.0 cents, according to the results of a survey recently completed by the Bureau of Labor Statistics. A very large proportion (72.2 percent) of the industry's 2,300 workers earned exactly 30.0 cents an hour, the legal minimum under the Fair Labor Standards Act. Only about 10 percent of the workers earned as much as 60.0 cents an hour, and most of these were employed in a small group of mills on the Pacific coast.

California mills paid by far the highest wages found in any of the four important rice-milling States, the average hourly earnings of California workers (74.1 cents) being more than double the average of workers in the three Southern States (32.5 cents). Fully 79.6 percent of the workers in the southern mills, but only 0.3 percent of those in California, earned only the minimum wage of 30.0 cents an hour or less. On the other hand, 75.6 percent of the California workers, but only 0.9 percent of the southern workers, earned 72.5 cents per hour or more.

Information provided by mail by mills cooperating in the survey indicates that few wage increases were granted in the South between the time of the survey and September 1, 1941, although wages in Pacific coast mills advanced about 13 percent.

The average workweek was 37.2 hours in length. Weekly earnings averaged \$13.37.

*Characteristics of the Industry*

Although the United States produces scarcely 1 percent of the world's commercial rice crop, it produces twice the amount of rice consumed annually in the United States. The domestic rice crop in 1939, according to reports of the United States Department of Agriculture, amounted to 2,354,000,000 pounds (14,530,000 barrels) of rough rice, with a farm value of \$40,000,000. The Census of Manufactures reports that commercial rice mills in this country handled 2,164,000,000 pounds (48,093,000 bushels) of rough rice in that year, with a total milled value of \$42,000,000. These mills, which clean and polish rice after it comes from the thresher and otherwise prepare it for use by the consumer, comprise the rice cleaning and polishing industry, as defined by the Census of Manufactures and as examined in the present report.

The Census of Manufactures reports that in 1939 there were 72 rice mills which had an annual production valued at \$5,000 or more.

<sup>1</sup> Prepared by Bernard Leo Smith of the Bureau's Division of Wage and Hour Statistics. The study was supervised by Frances M. Jones.

The total employment in these mills averaged 2,346 wage earners and 592 salaried workers, aggregating 2,938 employees.

Rice mills are situated in or adjacent to the rice-farming areas of Louisiana, Texas, Arkansas, and California, which produce nearly all of the rice of North America.<sup>2</sup> In the South, some rice mills are found in the cities of New Orleans, La.; Houston and Beaumont, Tex.; and Memphis, Tenn. The majority of the southern mills, however, are nearer to the plantations—in the small towns and villages of the Louisiana and Texas gulf coastal plains and the prairie region of eastern Arkansas. About two-thirds of the southern rice mills and wage earners are in communities with less than 25,000 population. Almost one-third of the mills, and a fourth of the wage earners, are in villages with less than 2,500 population. Important small-city rice centers are Crowley, La., and Stuttgart, Ark.

In the less-important producing area of California,<sup>3</sup> the mills are found in San Francisco, in Sacramento, and in small towns in the rice-farming area of the State's interior valleys.

#### SIZE OF COMPANY

Except for two very large, multiple-mill corporations, two or three farmer-owned cooperative mills, and a few smaller companies operating two mills each, the industry is comprised of small independent establishments. None of the mills employs as many as 200 workers except at the peak of the season, and a majority of them average fewer than 50 employees. In the industry as a whole, the number of wage earners per mill averages between 30 and 35 over a period of a year, increasing during the rice-milling season to 50 or more. Multiple-shift operation is common in the industry, although not the rule.<sup>4</sup>

#### SEASONAL OPERATION

The milling season covers a 7- to 9-month period beginning in August or September and ending in April or May. Its length depends primarily upon the weather and the rice-harvesting season, but it is also affected somewhat by market conditions, rice being stored in the rough and milled as it goes into the consumer market. October, November, and December witness the greatest activity, production slacking off in January or February and continuing at a more normal pace until the summer months. Many of the mills are closed during

<sup>2</sup> Small rice-producing areas are found in Missouri, South Carolina, Georgia, Mississippi, and elsewhere, but their production is not of commercial importance.

<sup>3</sup> According to reports of the United States Department of Agriculture, California produces approximately 17 percent of the total volume of rough rice grown in this country. The Census of Manufactures reports that California mills about 15 percent of the clean rice milled in the United States.

<sup>4</sup> Of 39 mills studied by the Bureau of Labor Statistics, 5 operated 3 shifts, 11 were on a 2-shift basis, and 23 worked 1 shift only.



the summer or operate with a skeleton crew on maintenance work until the new rice crop starts to arrive. The seasonal nature of the business has been recognized by the Administrator of the Fair Labor Standards Act, who has approved an extended workweek for 14 weeks during the year, without the payment of penalty rates for hours worked between 40 and 56 per week.

#### OCCUPATIONAL STRUCTURE AND THE LABOR FORCE

Rice is threshed from the stalks in the harvesting process, but goes to the mill in a rough, outer hull. After its arrival at the mill it is weighed and placed in temporary storage in the rough-rice warehouse. The first cleaning process is a separation of trash from the rough rice by shaker screens; after this, the rice passes to shelling stones which knock loose the outer hulls. These loose hulls are next separated from the grains of rice by an aspirator machine and a paddy separator. The brown rice then goes through the huller or first breaker cone which removes the outer bran layers, and then to the brush or second breaker cone which removes the inner bran layers, or polish. Very small broken pieces of brewer's rice are separated out, and the remaining milled rice goes to the trumble machine where it is coated with a harmless substance (usually glucose and talc) which acts as a preservative and improves the appearance of the rice grain. The coated rice then goes to grading cylinders where it is separated by size, after which it is bagged or packaged and stored in the clean-rice warehouse, or shipped. The bran and polish byproduct are likewise sacked for the market.

The milling machinery used in the industry operates automatically and needs little attention. A very small mill may require the services of only one skilled man to attend, adjust, and repair all machinery. This man may also be the mill superintendent or foreman of all operations, and may be assisted only by a few relatively unskilled laborers who sack rice and byproduct, truck, load, sweep, and perform other work about the mill. In contrast, a large mill may operate three shifts and employ on each shift a millwright, oilers, hopper men, hullermen, trumble-machine tenders, and general-machine tenders, in addition to a head miller and assistant millers, weighers, sackers, sewers, and truckers of byproduct, packaging-machine operators and helpers, a rough-rice warehouse crew, a clean-rice warehouse crew, and various miscellaneous workers and clerical employees. Machine tenders in such a plant work under the supervision of a head miller or foreman and do not have the responsibility nor need the technical knowledge and skill of a miller.

In the sacking operation, the sacks are ordinarily filled from a spout, check weighed, and sewed at the top by a special power sewing machine. In some instances sacks are sewed by hand. Often two or

three men work together, changing stations from time to time. In the packaging of rice in small packages or bags, standard packaging machinery is utilized, frequently tended by women.

Skilled labor, including millers and assistant millers, hullermen, engineers, millwrights, and certain other skilled maintenance workers, and miscellaneous working foremen, comprises scarcely a tenth of the total labor force. Semiskilled mill-machine tenders (about one-tenth of all workers), sackers, weighers, sewers (another tenth), and other miscellaneous occupations bring the total of the semiskilled group to about 35 percent. More than half of the workers in rice mills are classed as common laborers.

Men are employed exclusively in the mill proper; practically the only women on the mill pay rolls are those who tend packaging machines and do related work in the packing departments. Women form only 2.6 percent of the total employees in the industry.

Negroes find employment in this industry to the extent of one-half of the total labor force. Practically all of the Negroes are in southern mills, where they make up about 55 percent of all workers. Most of them are in common-labor jobs; in fact, they comprise about 70 percent of all the common labor in the industry (76.4 percent in southern mills). Negroes are also sometimes employed as machine tenders, sackers and weighers, truck drivers, and in various other jobs of a semiskilled nature.

#### COLLECTIVE-BARGAINING CONTRACTS

Collective-bargaining agreements are comparatively rare in the industry. Nevertheless, some of the larger companies have such agreements and it is estimated that one-fourth of the workers in the industry work under written contracts with their employers. In the South, the workers under agreements are represented by the American Federation of Grain Processors' Council,<sup>5</sup> affiliated with the American Federation of Labor. Two unions are active in the California mills, all of which have union contracts. The San Francisco and Sacramento workers are represented by the Weighers, Warehousemen, and Cereal Workers Division of the International Longshoremen's and Warehousemen's Union (I. L. W. U.), a C. I. O. affiliate. The mills in the interior regions have agreements which cover all warehouse and rice-mill workers, with the International Brotherhood of Teamsters, Chauffeurs, Stablemen, and Helpers, an A. F. of L. affiliate.

<sup>5</sup> This was the only union having a contract, at the time of the Bureau's survey, with southern mills which were included in the survey.

### Scope and Method of Survey

The survey of earnings and hours in the rice-milling industry was undertaken by the Bureau of Labor Statistics at the request of the Administrator of the Fair Labor Standards Act. The purpose of the survey was to provide a factual basis for recommending a new minimum wage for the industry. The study of rice mills comprises one segment of a comprehensive study of the wage structure of all grain-products industries.

The survey was conducted in the spring of 1941 and covered conditions in January and February of that year, a period subsequent to peak seasonal operation but believed to be representative of normal conditions in the industry. It included data for 39 mills and 1,810 rice workers. It also covered 111 clerical and other office workers. This coverage is estimated to be approximately one-half of all employees in southern rice mills and all of the workers in the few commercial rice mills of California at the time of the survey. Although the samples for the two regions do not represent like proportions of the industry, wherever data for the two regions have been combined into total industry figures each region has been given a weighting proportionate to its importance in the industry. The establishments to be surveyed were carefully selected to assure proper consideration of all significant industry characteristics, such as size and location of mill, company affiliation, union affiliation, etc. The composition of the sample of the industry included in the survey is revealed in table 1.

TABLE 1.—*Distribution of Mills and Workers Included in Survey of Rice Cleaning and Polishing Industry, by State, Sex, and Race, 1941*<sup>1</sup>

State	Number of mills	Number of workers <sup>2</sup>								
		All workers			Males			Females		
		Total	White	Negro	Total	White	Negro	Total	White	Negro
All States.....	39	1,810	975	835	1,764	940	824	46	35	11
South.....	33	1,524	600	834	1,483	600	823	41	30	11
Louisiana.....	17	772	305	467	746	289	457	26	16	10
Texas.....	8	449	154	295	444	149	295	5	5	—
Arkansas.....	8	303	231	72	293	222	71	10	9	1
California.....	6	286	285	1	281	280	1	5	5	—

<sup>1</sup> Figures presented in this table represent the actual number of mills and workers covered in the survey. In later tables, presenting combined figures on hours and earnings for the industry as a whole, the data for California have been assigned a weight proportioned to California's importance in the industry.

<sup>2</sup> Data do not include 111 clerical and other office workers, 86 in the South and 25 in California.

The data used in the survey were collected by the Bureau's trained field representatives, pay-roll information being obtained directly from plant records and supplemented by conversations with company officials and by personal observation of plant processes. This field survey was later supplemented by a mail canvass of the 39 plants for



the purpose of learning what general changes in wage rates had occurred during the interval between the period studied and September 1, 1941.<sup>6</sup>

The information obtained by the field staff included actual hours worked and earnings received by each employee during a selected pay-roll period. The extra earnings from punitive overtime rates were separately reported, to permit the computation of average earnings data uninfluenced by such excess rates. The wage data presented in this report include only the earnings at regular rates of pay, except where total earnings including overtime are specifically noted. The hours used in all cases represent actual working time exclusive of lunch time but inclusive of rest periods. The occupation, sex, and color of employees, and the method of wage payment were also obtained for each employee scheduled. The skill classification of occupations here given is based on statements by plant officials concerning the relative skills involved and the amount of training required for proper performance of the various jobs.

All plant occupations were covered, including both direct and indirect workers in mill, warehouse, and maintenance departments, as well as working supervisors and clerical workers.<sup>7</sup> Data for clerical workers, however, are presented separately, having been excluded from all tabulations for mill workers.

### *Average Hourly Earnings*

#### METHODS OF WAGE PAYMENT

Rice milling is strictly a time-rate industry. No piece rates nor production bonuses were encountered in any mill studied. Hourly rates were the unit of pay for 96.7 percent of all workers, the remaining 3.3 percent being paid on a weekly or a monthly salary basis.

#### EARNINGS IN THE INDUSTRY AS A WHOLE

The hourly earnings of all workers in rice mills averaged 36.0 cents in January and February of 1941 (table 2). Skilled workers received an average wage of 51.1 cents, as compared with an average of 36.7 cents for semiskilled and 33.0 cents for unskilled labor.

<sup>6</sup> Incomplete returns indicate that very few changes in wage rates occurred in southern rice mills between the date of the Bureau's survey and September 1, 1941. However, some mills, particularly in Texas, increased wages approximately 16.7 percent in September or at the beginning of the new rice-milling season. Complete returns from the Pacific coast mills report that wage rates advanced from 4 to 13.3 percent in 5 of the 6 establishments in that region. A majority of the workers received the latter increase. The wage changes on the Pacific coast occurred in July and August, except in 1 mill where wages were advanced in May.

<sup>7</sup> Only workers considered to be covered by the Fair Labor Standards Act were included in the survey. It thus excludes a few executive, administrative, and professional workers.



TABLE 2.—Average Hourly Earnings of Rice-Mill Workers, 1941, by Region and Skill

Region	All workers	Skilled workers	Semiskilled workers	Unskilled workers
All regions.....	\$0.360	\$0.511	\$0.367	\$0.330
South.....	.325	.446	.333	.301
California.....	.741	.932	.737	.691

Almost three-fourths (72.2 percent) of all workers earned exactly 30.0 cents an hour, the lowest wage permissible under the Fair Labor Standards Act, and more than four-fifths (83.9 percent) received less than 40.0 cents, the highest minimum that may be fixed under the act (table 3). Only about 10 percent of the total workers—most of whom were in a single State—were paid as much as 60.0 cents an hour.

TABLE 3.—Percentage Distribution of Rice-Mill Workers, by Average Hourly Earnings and by Region, 1941

Average hourly earnings (cents)	Total industry	South	California	Average hourly earnings (cents)	Total industry	South	California
Under 30.0.....	0.7	0.7	0.3	62.5 and under 67.5.....	1.3	0.7	7.8
Exactly 30.0.....	72.2	78.9	—	67.5 and under 72.5.....	.3	.2	1.0
30.1 and under 32.5.....	3.1	3.4	.3	72.5 and under 77.5.....	5.2	.4	58.1
32.5 and under 35.0.....	2.1	2.3	—	77.5 and under 82.5.....	.5	.1	5.7
35.0 and under 37.5.....	5.3	5.8	—	82.5 and under 87.5.....	.5	.1	4.2
37.5 and under 40.0.....	.5	.5	—	87.5 and under 92.5.....	.4	.2	1.7
40.0 and under 42.5.....	2.0	2.2	.7	92.5 and under 97.5.....	.1	—	.7
42.5 and under 47.5.....	1.5	1.6	.3	97.5 and under 102.5.....	.2	.1	1.7
47.5 and under 52.5.....	1.3	1.3	1.0	102.5 and over.....	.3	—	3.5
52.5 and under 57.5.....	.6	.6	.7				
57.5 and under 62.5.....	1.9	.9	12.3	Total.....	100.0	100.0	100.0

## REGIONAL DIFFERENCES

From the standpoint of wage levels, the rice-milling industry is sharply divided into two regions—the South and California. The average California wage is considerably more than double the average wage in the southern rice region, the respective figures being 74.1 cents and 32.5 cents an hour.<sup>8</sup>

The striking difference in earnings between California and the South is permitted not only by the relatively small importance of wages as a cost of production in this industry,<sup>9</sup> but also by the limited extent of competition between the two regions. About half the California product is sold in Hawaii, where there appears to be a preference for the "Japan-type" rice that California produces.<sup>10</sup> In

<sup>8</sup> The average hourly earnings of California workers were increased by punitive overtime rates from 74.1 cents to 74.3 cents. The average for the South was increased from 32.5 cents to 33.4 cents by overtime rates.

<sup>9</sup> The Census of Manufactures reveals that wage payments in the industry in 1939 amounted to only 3.6 percent of the value of product, and little more than one-sixth of the value added by manufacture; these ratios were slightly lower in California than in the South.

<sup>10</sup> It is pertinent to mention that the yield of the "Japan-type" rice is abundant, and that prices paid to the planter are usually somewhat lower than those paid for the southern varieties.

Hawaii and on the west coast, where another large part of the California product is sold, the cost of transportation (commonly amounting to 10 to 25 percent of wholesale price) affords additional protection from southern competition. California producers have thus enjoyed a substantial area of monopoly, and their activities designed to influence prices have prompted an "order to cease and desist" from the Federal Trade Commission.

That the southern region is a reasonably homogeneous wage area may be judged from the State average hourly earnings data presented in table 4, and from the distribution of the mills in each State according to their individual mill-average earnings, shown in table 5. The highest-wage mill in the southern sample paid an average wage of 35.6 cents. The lowest-wage southern mill (with the exception of two mills believed to be exempt from the provisions of the Fair Labor Standards Act) paid all workers, including the miller, exactly 30.0 cents an hour. Wage levels in California mills averaged from 63.6 cents to 79.4 cents an hour.

TABLE 4.—Average Hourly Earnings, Weekly Hours, and Weekly Earnings of Rice-Mill Workers, 1941, by State

State	Average hourly earnings	Average weekly hours	Average weekly earnings
All States.....	\$0.360	37.2	\$13.37
South.....	.325	37.2	12.09
Louisiana.....	.322	36.2	11.67
Texas.....	.336	37.4	12.57
Arkansas.....	.314	39.6	12.44
California.....	.741	36.4	27.00

TABLE 5.—Distribution of Rice Mills, by State and by Average Plant Wage Level, 1941

State	Total mills	Mills paying average hourly wages of—			
		Under 32.5 cents	32.5 and under 35.0 cents	35.0 and under 37.5 cents	62.5 cents and over
All States.....	39	19	11	3	6
South.....	33	19	11	3	—
Louisiana.....	17	10	7	—	—
Texas.....	8	3	3	2	—
Arkansas.....	8	6	1	1	—
California.....	6	—	—	—	6

Practically all of the southern workers earned less than the modal group of the California distribution. Approximately 80 percent of the former received exactly 30.0 cents or less, and only 8.4 percent received as much as 40.0 cents. On the other hand, not quite 1 percent of the California workers earned less than 40.0 cents an hour, and

the first significant concentration of workers in that region occurred between 57.5 and 62.5 cents, which was practically the top of the distribution for the South. Only about one-fourth of the California workers received less than 72.5 cents; almost three-fifths received between 72.5 and 77.5 cents, and about one-eighth earned 77.5 cents or more; almost 5 percent were paid as much as \$1 per hour.

It is of interest to note that whereas wages in the South were supported by the legal minimum, wages in the six California mills were maintained at their relatively high level by union contracts with minimum-wage provisions. These minimum rates were not the same in each contract, but all fell between 57.5 cents and 77.5 cents; within this range were grouped 79.2 percent of all California wage earners.

#### SKILL AND OCCUPATIONAL DIFFERENCES

The duties connected with a given job are not so specific in a rice mill as they are in the typical manufacturing plant. There is considerable overlapping of jobs among the semiskilled and unskilled workers. For example, the skill involved in most of the packing operations is easily acquired, and the work is closely allied to trucking and stacking, often being performed by the same workers. There is also an overlapping of duties among machine tenders and the common-labor jobs. Many employees are hired as general millworkers and are put to work from day to day wherever they may be most needed at the time. This fact, plus the influence of minimum-wage regulations, helps to explain the pronounced concentration of workers in relatively narrow wage ranges. The overlapping of jobs is reflected not only in the distribution of the workers by average hourly earnings, but also in the average wages for the various occupational groups, shown in table 6.

In the southern rice region, truckers and general laborers had average hourly earnings of 30.2 cents; sackers, weighers, and sewers earned 30.8 cents; packing-machine operators averaged 30.7 cents; and carton packers received exactly 30.0 cents. All of these except the first group are classified, on the basis of opinion among millers, as semiskilled jobs requiring a short training period. Miscellaneous production-machine tenders earned 32.0 cents, and trumble-machine tenders received 34.3 cents an hour. The general average for the semiskilled group was 3.2 cents (11 percent) above the average for unskilled workers. The skilled group, which includes primarily the millers, hullermen, foremen, and millwrights, received average earnings of 44.6 cents an hour, or 11.3 cents (30 percent) above the semiskilled, and 14.5 cents (48 percent) above the unskilled workers' average earnings.



TABLE 6.—Average Hourly Earnings, Weekly Hours, and Weekly Earnings of Rice-Mill Workers, 1941, by Skill, Occupation, Sex, and Region

Skill, occupational group, and sex	Number of workers			Average hourly earnings		
	All regions <sup>1</sup>	South	California	All regions <sup>1</sup>	South	California
All workers.....	1,668	1,524	286	\$0.360	\$0.325	\$0.741
Males.....	1,624	1,483	281	.360	.325	.743
Females.....	44	41	5	.317	.300	.654
Skilled workers, male.....	119	102	34	.511	.446	.932
Millers, assistant millers, and mill foremen.....	39	27	25	.548	.403	.918
Foremen and assistant foremen, working (warehouse and packaging).....	21	20	2	.413	.413	( <sup>2</sup> )
Hullermen.....	30	29	2	.445	.439	( <sup>2</sup> )
Miscellaneous maintenance workers.....	29	26	5	.589	.527	1.121
Semiskilled workers.....	584	534	99	.367	.333	.737
Males.....	544	495	97	.369	.335	.737
Females.....	40	39	2	.318	.300	( <sup>2</sup> )
Trumble-machine attendants, male.....	34	33	3	.351	.343	( <sup>2</sup> )
Miscellaneous production-machine attendants, male.....	163	144	37	.366	.328	.745
Packaging-machine operators.....	44	43	2	.322	.307	( <sup>2</sup> )
Males.....	6	6		( <sup>2</sup> )	( <sup>2</sup> )	
Females.....	38	37	2	.318	.300	( <sup>2</sup> )
Sackers, weighers, and sewers, packing, male.....	172	151	41	.357	.308	.732
Packers (into cartons).....	26	26		.300	.300	
Males.....	24	24		.300	.300	
Females.....	2	2		( <sup>2</sup> )	( <sup>2</sup> )	
Truck drivers and teamsters, male.....	32	30	4	.348	.316	( <sup>2</sup> )
Miscellaneous production workers, male <sup>3</sup> .....	49	44	10	.503	.468	.766
Miscellaneous maintenance workers, male.....	64	63	2	.353	.349	( <sup>2</sup> )
Unskilled workers.....	965	888	153	.330	.301	.691
Males.....	961	886	150	.330	.301	.693
Females.....	4	2	3	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
Truckers and general laborers.....	877	804	146	.334	.302	.711
Males.....	873	802	143	.334	.302	.713
Females.....	4	2	3	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
Miscellaneous maintenance workers, male.....	44	43	1	.300	.295	( <sup>2</sup> )
Watchmen, male.....	44	41	6	.300	.295	.358

Skill, occupational group, and sex	Average weekly hours			Average weekly earnings		
	All regions <sup>1</sup>	South	California	All regions <sup>1</sup>	South	California
All workers.....	37.2	37.2	36.4	\$13.37	\$12.09	\$27.00
Males.....	37.5	37.6	36.5	13.50	12.21	27.09
Females.....	25.6	25.3	33.6	8.12	7.59	21.96
Skilled workers, male.....	44.4	44.7	42.0	22.68	19.90	39.17
Millers, assistant millers, and mill foremen.....	47.0	48.8	42.7	25.75	19.67	39.26
Foremen and assistant foremen, working (warehouse and packing).....	44.4	44.4	( <sup>2</sup> )	18.36	18.36	( <sup>2</sup> )
Hullermen.....	41.7	41.8	( <sup>2</sup> )	18.57	18.32	( <sup>2</sup> )
Miscellaneous maintenance workers.....	43.4	43.8	40.0	25.57	23.11	44.85
Semiskilled workers.....	39.9	39.9	39.1	14.64	13.31	28.83
Males.....	41.0	41.1	39.1	15.13	13.77	28.81
Females.....	25.0	24.6	( <sup>2</sup> )	7.94	7.37	( <sup>2</sup> )
Trumble-machine attendants, male.....	43.4	43.5	( <sup>2</sup> )	15.22	14.89	( <sup>2</sup> )
Miscellaneous production-machine tenders, male.....	41.7	42.1	38.1	15.24	13.49	28.38
Packaging-machine operators.....	26.4	26.1	( <sup>2</sup> )	8.52	8.02	( <sup>2</sup> )
Males.....	( <sup>2</sup> )	( <sup>2</sup> )		( <sup>2</sup> )	( <sup>2</sup> )	
Females.....	24.4	23.9	( <sup>2</sup> )	7.78	7.18	( <sup>2</sup> )
Sackers, weighers, and sewers, packing, male.....	38.8	38.8	39.0	13.88	11.96	28.54
Packers (into cartons).....	32.5	32.5		9.75	9.75	
Males.....	32.2	32.2		9.66	9.66	
Females.....	( <sup>2</sup> )	( <sup>2</sup> )		( <sup>2</sup> )	( <sup>2</sup> )	
Truck drivers and teamsters, male.....	45.1	45.6	( <sup>2</sup> )	15.69	14.40	( <sup>2</sup> )
Miscellaneous production workers, male <sup>3</sup> .....	41.6	41.8	42.3	20.94	19.55	32.44
Miscellaneous maintenance workers, male.....	44.3	44.4	( <sup>2</sup> )	15.66	15.49	( <sup>2</sup> )
Unskilled workers.....	34.6	34.8	33.5	11.44	10.46	23.12
Males.....	34.6	34.7	33.5	11.43	10.46	23.25
Females.....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
Truckers and general laborers.....	34.0	34.1	32.9	11.34	10.29	23.41
Males.....	34.0	34.1	33.0	11.34	10.28	23.56
Females.....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
Miscellaneous maintenance workers, male.....	40.5	40.5	( <sup>2</sup> )	12.16	11.94	( <sup>2</sup> )
Watchmen, male.....	42.0	41.8	44.8	12.62	12.31	16.05

<sup>1</sup> In the combined figures on hours and earnings for the industry as a whole, California and the South have been assigned weights proportionate to their importance in the industry.

<sup>2</sup> Number of workers insufficient to justify computation of an average.

<sup>3</sup> Includes stock clerks, weighers, etc.



In California, unskilled workers fared relatively better in relation to the semiskilled and skilled than in southern mills; the semiskilled workers had a 7-percent and the skilled workers a 35-percent margin over the unskilled in California, as compared with the 11-percent and 48-percent differences in the South. The accorded wage advantage to skilled workers over the semiskilled, however, was identical in both regions (30 percent).

### Weekly Hours and Earnings

#### WEEKLY HOURS OF WORK

The 8-hour day and the 40-hour week were considered to be the standard full-time hours of workers in most rice mills. Only 8 of the 39 mills studied had a longer regular workweek for mill or warehouse workers. These 8 mills, all in the South, had normal full-time hours which ranged from 44 to 72 per week and, except for 2 which claimed exemption from the provisions of the Fair Labor Standards Act, paid time and a half for all work above 40 hours per week. Two mills had a standard workweek of 36 hours, and 1 mill had a 30-hour week; these also were southern mills. A few mills observed 4-day weeks with 10-hour days, and a few had 6-day weeks.

Workers in the mill departments of a majority of the mills were on duty for an unbroken 8-hour period, eating lunch on the job. A lunch period of 1 hour was the rule for the warehouse forces, however, the nature of their duties being such that a suspension of work for lunch is desirable and can be easily arranged.

The average number of hours actually worked per week during the period surveyed was 37.2 (table 4). Almost two-fifths (38.9 percent) of the employees worked exactly 40 hours, a slightly smaller number (36.2 percent) worked less than 40 hours, and one-fourth (24.9 percent) worked longer than 40 hours. Five percent worked more than 52 hours (table 7).

TABLE 7.—Percentage Distribution of Rice-Mill Workers, by Number of Hours Worked per Week and by Region, 1941

Hours actually worked in 1 week	All regions	South	Cali- fornia	Hours actually worked in 1 week	All regions	South	Cali- fornia
Under 16.....	7.8	7.7	7.8	48 and under 52.....	4.4	4.8	0.3
16 and under 24.....	5.0	5.2	3.8	52 and under 56.....	1.7	1.8	1.4
24 and under 32.....	7.1	7.3	4.3	56 and under 60.....	1.6	1.7	.....
32 and under 36.....	5.6	5.8	3.5	60 and under 64.....	1.5	1.5	1.4
36 and under 40.....	10.7	11.4	2.4	64 and under 72.....	.2	.3	.....
Exactly 40.....	38.9	35.9	73.5	72 and over.....	.9	.9	.3
Over 40 and under 44.....	7.6	8.2	1.0				
44 and under 48.....	7.0	7.5	.3	Total.....	100.0	100.0	100.0

Slightly longer hours were worked in the South than in California during the period studied, the respective average weekly hours being

37.2 and 36.4. The distribution of workers in each of the two regions according to the number of hours they worked during the week studied (table 7) provides an interesting comparison. In California, 73.5 percent of the employees worked exactly 40 hours, which was full-time for those mills; 21.8 percent worked a short week, and only 4.7 percent worked overtime. In the South, however, only 35.9 percent worked exactly 40 hours, 37.4 percent worked a shorter week, and 26.7 percent had a longer week than 40 hours. Even after making allowance for the plants which had a normal workweek of either more or less than 40 hours, it would appear that the southern mills did not adhere as rigidly to a constant workweek as did the mills in California, both short time and overtime being more prevalent in the former than in the latter region.

## WEEKLY EARNINGS

Workers in the industry earned an average weekly wage of \$13.37. About 56 percent received between \$10 and \$15, the greater part of this group being paid for 40 hours at 30 cents an hour. Almost 22 percent, mostly short-time workers, were paid less than \$10 per week. The earnings of a few individuals ranged as high as \$50 or more, but scarcely 2 percent of all workers received as much as \$30.

The weekly earnings for the southern region averaged only \$12.09.<sup>11</sup> Here, about 60 percent of the workers earned between \$10 and \$15, and 23 percent received less than \$10. About 6 percent were paid \$20 or more.

Average weekly earnings in the California mills were, of course, more than double the amount received by the southern rice workers. With average earnings of \$27 per week,<sup>11</sup> California mills paid about half of their workers a weekly wage ranging from \$30 to \$35, and almost a tenth of the workers earned more. About one-fourth of the workers received from \$20 to \$27.50; and 15 percent, practically all short-time workers, were paid less than \$20. (Tables 4 and 8.)

TABLE 8.—Percentage Distribution of Rice-Mill Workers, by Amounts Earned per Week at Regular Rates and by Region, 1941

Weekly earnings	All regions	South	California	Weekly earnings	All regions	South	California
Under \$5.00.....	8.0	8.5	2.1	\$25.00 and under \$27.50.....	1.7	1.3	6.4
\$5.00 and under \$7.50.....	4.8	4.8	4.6	\$27.50 and under \$30.00.....	.5	.4	1.7
\$7.50 and under \$10.00.....	8.8	9.6	.....	\$30.00 and under \$32.50.....	4.3	.5	45.2
\$10.00 and under \$12.50.....	40.1	43.7	3.1	\$32.50 and under \$35.00.....	.7	.2	4.6
\$12.50 and under \$15.00.....	15.6	17.0	1.0	\$35.00 and under \$37.50.....	.4	.3	2.4
\$15.00 and under \$17.50.....	6.7	7.2	1.0	\$37.50 and over.....	.8	.1	6.8
\$17.50 and under \$20.00.....	2.9	2.8	3.1				
\$20.00 and under \$22.50.....	2.3	6.2	5.0				
\$22.50 and under \$25.00.....	2.4	1.6	13.0	Total.....	100.0	100.0	100.0

<sup>11</sup> These figures include all earnings at regular rate, but exclude that part of the overtime earnings received from the extra overtime rate. Total weekly earnings, including overtime earnings for the southern region, were \$12.42, and for California they amounted to \$27.06.

*Earnings and Hours of Office Workers*

The survey of wages and hours in rice mills covered 111 clerical and other office workers in addition to the millworkers for whom data are presented above. This group includes not only office workers attached to the rice mills studied but also a proportionate sample of the workers in central offices of the large multiple-mill companies.

The wages of these office employees averaged 56.6 cents an hour, which compares favorably with the wages of skilled workers in the mills. Office clerks, bookkeepers, and stenographers earned 60.0 cents an hour. Male workers in this group had an average wage of 65.0 cents, and female workers averaged 50.9 cents. Office boys and porters earned 33.0 cents an hour, a wage equal to the industry average for unskilled millworkers.

A comparison of wages for office workers in the two regions shows differences comparable with those of millworkers discussed above. Southern mills paid their office employees average hourly wages of 51.3 cents, as compared with a 94.0-cent average in California. The weekly earnings in the South were \$21.85, while weekly earnings in California averaged \$35.67. The workweek for this class of employee in the South was considerably longer than the hours that prevailed in California.

Detailed wage and hour data for office workers are given in table 9.

TABLE 9.—Average Hourly Earnings, Weekly Hours, and Weekly Earnings of Office Workers in Rice Mills, 1941, by Occupation, Sex, and Region

Occupational group and sex	Number of workers			Average hourly earnings			Average weekly hours			Average weekly earnings		
	All regions	South	California	All regions <sup>1</sup>	South	California	All regions <sup>1</sup>	South	California	All regions <sup>1</sup>	South	California
All office workers..	111	86	25	\$0.566	\$0.513	\$0.940	42.0	42.6	38.0	\$23.78	\$21.85	\$35.67
Males.....	75	58	17	.592	.532	.954	43.0	43.7	38.3	25.45	23.23	36.55
Females.....	36	28	8	.509	.470	.909	39.9	40.4	37.2	20.33	19.00	33.80
Clerks, bookkeepers, and stenographers.....	97	74	23	.600	.543	.976	41.8	42.5	37.9	25.12	23.10	37.02
Males.....	61	46	15	.650	.584	1.010	43.0	43.8	38.4	27.96	25.59	38.74
Females.....	36	28	8	.509	.470	.909	39.9	40.4	37.2	20.33	19.00	33.80
Office boys and porters, male.....	14	12	2	.330	.330	( <sup>2</sup> )	43.0	43.0	( <sup>2</sup> )	14.19	14.19	( <sup>2</sup> )

<sup>1</sup> In the combined figures on hours and earnings for the industry as a whole, California and the South have been assigned weights proportionate to their importance in the industry.

<sup>2</sup> Number of workers insufficient to justify computation of an average.



The distribution of office workers in each region, by average hourly earnings, is given in table 10.

TABLE 10.—Percentage Distribution of Office Workers in Rice Mills, by Average Hourly Earnings and by Region, 1941

Average hourly earnings (cents)	All regions	South	Cal- ifornia	Average hourly earnings (cents)	All regions	South	Cal- ifornia
Under 30.0.....	5.1	5.8	-----	62.5 and under 67.5.....	13.3	15.1	-----
Exactly 30.0.....	6.1	7.0	-----	67.5 and under 72.5.....	3.1	2.3	8.0
30.1 and under 32.5.....	1.0	1.2	-----	72.5 and under 77.5.....	4.1	2.3	8.0
32.5 and under 35.0.....	5.1	5.8	-----	77.5 and under 82.5.....	3.1	2.3	12.0
35.0 and under 37.5.....	4.1	4.7	-----	82.5 and under 87.5.....	6.1	7.0	8.0
37.5 and under 40.0.....	4.1	4.7	-----	87.5 and under 92.5.....	3.1	2.3	8.0
40.0 and under 42.5.....	3.1	3.5	-----	92.5 and under 97.5.....	-----	-----	-----
42.5 and under 47.5.....	18.3	20.9	-----	97.5 and under 102.5.....	1.0	-----	8.0
47.5 and under 52.5.....	6.1	7.0	4.0	102.5 and over.....	5.1	-----	36.0
52.5 and under 57.5.....	2.0	2.3	-----				
57.5 and under 62.5.....	6.1	5.8	8.0	Total.....	100.0	100.0	100.0



## HOURS OF WORK IN FRENCH MINES AND QUARRIES

THE hours of work in coal and mineral mines, and in stone, slate, and bituminous-schist quarries and mines, in France, were increased by decrees issued on July 18, 1941.<sup>1</sup> A decree of June 21, 1936, had reduced the hours of work of underground miners to 38 hours and 40 minutes per week, with a maximum workday of 7 hours and 45 minutes.<sup>2</sup> This law was somewhat modified by a decree law of November 12, 1938, which, while retaining the workweek of 38 hours and 40 minutes, allowed a choice of working a 5½- or a 6-day week.<sup>3</sup> The decrees of July 18, 1941, suspend for the mining industries the provisions of the laws of August 13 and of September 18, 1940, relative to the time limit for work in various industries, raising the weekly hours from 40 to 48 for surface work and to 46 hours and 30 minutes for underground work.

Supplementary hours because of an extraordinary increase of work or to make up lost time may be authorized in mineral mines by the chief mining engineer, up to a maximum of 60 hours per week and 10 hours per day. In stone and slate quarries supplementary hours may be allowed up to a maximum of 75 hours per year, and in coal and bituminous-schist mines additional hours are limited to 1 hour per working day.

The overtime rate in mines and quarries is fixed at 10 percent over the normal hourly wage.

<sup>1</sup> Report from H. Freeman Mathews, first secretary, American Embassy, Vichy, France; Journal Officiel, Vichy, August 9, 1941.

<sup>2</sup> See Monthly Labor Review, September 1936 (p. 621).

<sup>3</sup> Idem, March 1939, (p. 664.)



## SIMPLIFICATION OF WAGE DEDUCTIONS IN GERMANY

AN ORDER dated July 1, 1941, entitled "First order for the simplification of wage deductions," was published in the *Reichsgesetzblatt*, Part 1, for July 4, 1941.<sup>1</sup> The German Finance and Labor Ministries issued this order because of an inordinate growth in the number of wage deductions for various purposes and in various amounts. Among these deductions were those for income, wage, and army taxes; old-age, accident, disability, sickness, and unemployment insurance contributions; dues to the Labor Front and its various societies, and to the Hitler Youth Organization; "expected" donations to the "Winter Help"; and gift packages for the soldiers at the fighting fronts. Other factors which led to the issuance of the order were the complicated methods of calculation and the enormous red tape involved in the collection of these deductions; and the acute shortage of bookkeepers, accountants, file clerks, and reporters, because of heavy military levies on manpower.

Previously a variety of wage bases had been used for the calculation of deductions. For instance, wage taxes were based on a different classification than that used for computing dues to the Labor Front; the order of July 1, 1941, provided for a uniform classification.

The order also reduced the range of the various wage classes. As all wages falling in the same class are subject to the same amount of tax, this will result in some slight reduction in taxes paid by workers whose wages were just above the former lower limit in a bracket, and to a slight increase in taxes paid by the workers whose wages were just below the former upper limit of the bracket.

The order abolishes a previous provision that, for the purposes of calculating the amount of the wage tax, 52 marks a month should be added to the wages of a married woman living with her husband. This change in wage deduction for married women was to encourage them to seek paid employment.

Changes in wage taxes resulting from a change in the status of the worker can now be made retroactive to the date of change of status. Before the above order, this was not permitted.

The order permits employers to pay to the public treasurer of the community the wage taxes collected from all their workers for civic purposes, regardless of the fact that the workers may live in many different communities. Formerly these taxes were proportionately paid to all the communities involved. Under the new plan the public treasurer is to distribute these taxes among the communities involved, every quarter year.

<sup>1</sup> Data are from *Soziale Praxis* (Berlin), August 1, 1941.

The order abolishes the army tax, which was said to fulfill a military rather than a fiscal service. The number of workers who were not drafted into the army and were not engaged in production of armaments and other war necessities, and were therefore assessed a war tax, had greatly declined. The total sum of war taxes had thus become negligible. The abolishment of the army tax made hardly any impression upon the war finances, but it lessened the calculation and collection work of the employers.



## NEW FAMILY-ALLOWANCE SYSTEM IN GERMANY

THE family-allowance system in Germany was modified by an ordinance of December 9, 1940, which went into effect January 1, 1941.<sup>1</sup> From that date it was provided that a monthly allowance of 10 reichsmarks should be paid to all German heads of families residing in the "Grand-Reich" who have at least 3 children under 21 years of age.

According to *Soziale Praxis* (Berlin) of March 15, 1941, in making these grants the objective of the State is to develop the number of "healthy families worthy of the German community." Consequently, those entitled to family allowances are the heads of families of German nationality who submit themselves unrestrictedly to taxation, have their domicile or their habitual residence in the parts of the Reich where the fiscal law is applicable (for German nationals residing in the protectorate, for example, special provisions exist), and whose families include 3 children or more under 21 years of age. Under "children" are included not only legitimate children but stepchildren, and adopted children (of German blood or related, that is to say, in general, of European origin except Jews and (Spanish) gypsies).

The allowance is granted regardless of the income or the financial circumstances of the parents and the children. Furthermore, the State allowance may be paid even when the family is in receipt of other family allowances. On the other hand, subordinate administrative authorities, especially sanitary officers and the regional directors of the German Workers National Socialist Party, can protest the payment of these allowances, with a view to assuring the purity of blood in numerous and politically irreproachable families.

The allowance may be granted from the first child when the head of the family is stricken with a disability amounting to at least 85 percent incapacity for work, or when he receives a sick benefit; when the head of the family is a single woman; or in the case of a single woman with children; or when the children are complete orphans.

<sup>1</sup> Belgium. Ministère du Travail et de la Prévoyance Sociale. *Revue du Travail*, Brussels, March 1941.

When children are those of an unmarried mother, the father must be known. Italians are treated as Germans, by virtue of a reciprocal agreement. The nationals of other countries can receive family allowances under an exception if the subordinate administrative authorities and the National Socialist Party consent.

In order to obtain a family allowance the request must be made to the Finance Administration. After examination by that office the request is transmitted to the subordinate administrative authorities and to the National Socialist Party.

An allowance is not subject to seizure. The State, however, can make such benefit serve to meet an obligation to the State—for example, the payment of taxes—when such action does not imperil the maintenance of the children. Persons entitled to family allowances can request that the taxes which they owe the State be deducted from the amount of their allowances.

The new regulation has reduced, from 20 to 10 reichsmarks, the amount of the allowance previously granted from the fifth child. However, this reduction is offset by the extension of the age limits. In future the allowance is to be paid up to 21 years of age instead of up to 16.

The principal characteristic of this new system, *Soziale Praxis* states, is its technical assimilation with the revenue tax.

The family allowances referred to above are the responsibility of the State. However, allowances paid by private enterprises are provided for in certain collective agreements. Also, supplements for children are still granted by insurance funds for medical, dental, and pharmaceutical care. Officials, agents, and persons working for public administrative agencies still receive allowances for children. These allowances are not uniform, their amounts vary often with the number of dependent children, as was the case for family allowances to officials and employees of public administrations (the allowance has since been fixed uniformly at 20 reichsmarks per child). Sometimes this allowance is paid for the first child, at other times it begins only with the fourth or fifth child. The age limit is sometimes 16 and sometimes 21 years.

In all cases, according to the article under review, the new regulation should be considered as a decisive step toward the integration of family allowances into the German salary and tax system. It seems certain that supplementary measures will be taken. After the war there may be allowances for the first and second children, in the form of rent allowances. The rent reductions provided in the housing program should be taken into account in considering other measures of population policy.

From January 1941 up to the time of the preparation of the article in *Soziale Praxis* of March 15, 1941, 2 million families had received 50,000,000 reichsmarks in family allowances.



## FAMILY ALLOWANCES AND MARRIAGE LOANS IN SPAIN <sup>1</sup>

MORE substantial family allowances, together with marriage loans and prizes, are provided for by a Spanish decree of February 22, 1941. The new family-allowance rates, which are 100 percent above those provided for in the act of July 18, 1938, are given below:

Allowance on account of—	<i>Based on monthly wage (pesetas)</i>	<i>Based on daily wage (pesetas)</i>
2 children.....	30	1. 20
3 children.....	45	1. 80
4 children.....	60	2. 40
5 children.....	80	3. 20
6 children.....	100	4. 00
7 children.....	120	4. 80
8 children.....	150	6. 00
9 children.....	180	7. 20
10 children.....	210	8. 40
11 children.....	250	10. 00
12 children.....	290	11. 60

The monthly allowance is raised by an additional 50 pesetas for each child after the twelfth, and the daily allowance is raised in the same proportion.

Each family will be paid a lump sum equal to 50 percent of the total allowances received from the date upon which the scheme was introduced up to March 31, 1941.

Under the system of marriage loans, a couple may borrow 2,500 pesetas, repayable, without interest, at 1 percent per month. The loan may be 5,000 pesetas if an insured woman worker gives up her employment and refrains from entering employment as long as her husband is employed or capable of work.

The marriage loan is repayable without interest at 1 percent per month. The amount to be returned is reduced at the birth of each child. Annual provincial prizes totaling 1,000 pesetas and a national prize of 5,000 pesetas are to be granted to the families "which have had the largest number of children, and prizes to the same amount to the families which have the largest number of living children."

<sup>1</sup> International Labor Office, *International Labor Review*, Montreal, May 1941.



## *Wage and Hour Regulation*

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### 40-CENT MINIMUM FOR SHOE INDUSTRY

A MINIMUM hourly wage of 40 cents for employees in the shoe industry was established by order of the Administrator of the wage and hour law, to take effect on and after November 3, 1941.<sup>1</sup> The 40-cent minimum rate is the highest that may be set under the terms of the law. As a result of this action, approximately 96,000 of the 250,000 workers employed in the industry were expected to receive increases in hourly pay. These low-wage employees are predominantly women. For the purpose of the wage and hour law the shoe industry includes the manufacture of cut stock and findings.

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### 40-CENT MINIMUM FOR WOMEN'S APPAREL INDUSTRY <sup>2</sup>

WAGES of not less than 40 cents an hour must be paid to employees in the women's apparel industry who are subject to the terms of the Fair Labor Standards Act, by order of the Administrator. This wage order, which became effective on September 29, 1941, applies to the production of women's, misses', and junior's dresses, washable service garments, blouses, and neckwear from woven or purchased knit fabric, women's, misses', children's, and infants' underwear, nightwear, and negligees from woven fabric; corsets and other body-supporting garments from any material; other garments similar to the foregoing; and infants' and children's outerwear.

As defined, the women's apparel industry covers all occupations in the industry which are necessary to the production of the specified articles, including clerical, maintenance, shipping, and selling occupations except when carried on in wholesaling or selling departments physically segregated from the manufacturing departments.

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<sup>1</sup> U. S. Department of Labor. Wage and Hour Division. Press release No. R. 1600.

<sup>2</sup> Idem, Press release No. R. 1570.

## **40-CENT MINIMUM FOR GRAY-IRON JOBBING FOUNDRIES <sup>1</sup>**

EFFECTIVE November 3, 1941, a minimum wage of 40 cents an hour was established for the gray-iron jobbing foundry industry. This minimum applies to workers covered by the Fair Labor Standards Act, by order of the Administrator. It was expected to result in a wage increase for 14,000 of the 175,000 workers in the industry.



## **35-CENT MINIMUM FOR LUMBER INDUSTRY <sup>2</sup>**

BY ORDER of the Administrator of the Fair Labor Standards Act a minimum hourly wage of 35 cents became effective in the lumber industry on November 3, 1941. As a result of this action it was estimated that approximately 168,000 workers received increases in wage rates. The manufacture of veneer and plywood is classified as within the lumber and timber products industry.



## **40-CENT MINIMUM FOR WOOD-FURNITURE INDUSTRY <sup>2</sup>**

WORKERS in the wood-furniture industry who are subject to the terms of the Fair Labor Standards Act are entitled to a minimum hourly wage of 40 cents by wage order of the Administrator. The 40-cent minimum was effective on and after November 3, 1941, and was expected to increase the rate of pay of 43,000 workers.

In defining the coverage of both the lumber and wood furniture wage orders the Administrator clarified the division between the two industries. Furniture production includes "the manufacture and assembling from wood of furniture parts \* \* \* separately, set up or knocked down \* \* \* all woodworking operations necessary to the manufacture of furniture following delivery of the wood from the dry kiln or air-dried dimension shed." Employees engaged in the manufacture of furniture parts are covered, whether they work in the furniture factory or a sawmill. Wood parts, produced for furniture manufacturers are classed as "furniture parts" and as within the furniture industry if the woodworking operations include processes other than rip sawing, cut-off sawing, molding, planing, and resawing. Manufacture from plywood or veneer of "furniture parts" is within the furniture industry and therefore covered by the 40-cent minimum wage.

<sup>1</sup> U. S. Department of Labor. Wage and Hour Division. Press release No. R. 1591.

<sup>2</sup> *Ibid.*, Press release No. R. 1587.

## WAGE DETERMINATIONS UNDER PUBLIC CONTRACTS ACT <sup>1</sup>

IN THE period from July to early October 1941 the Secretary of Labor made wage determinations in five industries under the Public Contracts Act and either amended or extended the determinations previously issued for five other industries. The terms of the Secretary's orders are shown below.

### *Instruments Industries*

The Secretary issued three determinations simultaneously, effective September 23, for the scientific industrial and laboratory instruments industry, the surgical instruments and apparatus industry, and the dental goods and equipment industry. The determinations prescribed minimum wages of 40 cents an hour or \$16 for a week of 40 hours for the first two industries and for the durable-goods branch of the dental goods and equipment industry. A rate of 35 cents an hour (\$14 for 40 hours) was set for the consumable-goods branch of the latter industry.

Excepting in the consumable-goods branch of the dental-equipment industry, each determination permits learners to be employed at the rate of 35 cents an hour or \$14 for a week of 40 hours for a period not to exceed 60 days, if the total number of employees so classified does not exceed 10 percent of the total number of employees in one establishment in any given pay-roll period or workweek.

### *Evaporated-Milk Industry*

Persons employed in the manufacture and supply of evaporated milk for contracts with agencies of the United States have prevailing minimum wages of 32½ to 50 cents an hour, according to geographic location, under the terms of the determination of the Secretary of Labor effective on or after November 3, 1941. The 50-cent hourly rate (\$20 for 40 hours) applies in the States of Washington, Oregon, and California; the 40-cent rate (\$16 for 40 hours) is for Idaho, Montana, Nevada, Utah, Arizona, New Mexico, Colorado, Wyoming, North and South Dakota, Nebraska, Minnesota, Iowa, Wisconsin, Michigan, and Ohio; and the 32½-cent rate (\$13 for 40 hours) in the remaining States and the District of Columbia.

### *Paint and Varnish Industry*

Beginning November 6, 1941, the prevailing minimum wage in the paint and varnish industry on all public contracts is 40 or 50 cents an

<sup>1</sup> U. S. Department of Labor. Division of Public Contracts. Press releases Nos. 2021, 2110, 2111, 2112, 2115, 2156, 2171, and 2181.

hour, according to geographic area. The 40-cent rate (\$16 for 40 hours) applies in the States of Virginia, North Carolina, South Carolina, Tennessee, Georgia, Florida, Alabama, Mississippi, Louisiana, and Arkansas; and the 50-cent rate (\$20 for 40 hours) was established for the remaining States and the District of Columbia.

As defined in the determination the paint and varnish industry consists of that industry which manufactures pigments or colors, either in dry or paste form; paints mixed ready for use or in dry or paste form; varnishes, lacquers, enamels; fillers, putty, top dressings; paint and varnish removers; furniture and floor wax; and lacquer thinners.

### *Furniture Industry*

Effective on July 28, 1941, the 45-cent hourly wage (\$18 for 40 hours) which was applied in the metal-furniture branch of the furniture industry by wage order effective May 13, 1939,<sup>2</sup> was also determined as the prevailing minimum in the manufacture and supply of metal cabinets for printers' type; metal cabinet partitions; metal tool boxes, tool cabinets, and tool chests; metal trunks (box type); metal rotating bins; metal sectional bins; and metal work benches, desks, and tables.

### *Drug and Medicine Industry*

The hourly rate of pay was raised from 37½ to 40 cents for work undertaken on Government contracts in the drug and medicine industry, and the determination was extended to include the toilet-preparations industry for which bids are solicited on and after September 19, 1941. The 37½-cent rate was fixed by a determination of the Secretary in 1939.<sup>3</sup> However, when the Administrator of the Fair Labor Standards Act issued an order,<sup>4</sup> effective July 7, 1941, establishing the 40-cent rate for workers in this industry engaged in interstate commerce or the production of goods for interstate commerce, action was instituted to apply the higher rate on Government contracts.

In proposing extension and amendment of the wage determination the predominantly interstate character of the drug, medicine, and toilet-preparations industry was taken into account and also the fact that the wage order under the Fair Labor Standards Act made this the prevailing rate for the industry.

### *Leather and Sheep-Lined Jackets Industry*

On and after September 19, 1941, the coverage of the original determination for the leather and sheep-lined jackets industry (effective

<sup>1</sup> Monthly Labor Review, issue of October 1940 (p. 816).

<sup>2</sup> Idem (p. 817).

<sup>4</sup> Monthly Labor Review, issue of August 1941 (p. 480).



May 13, 1938)<sup>5</sup> was extended to include the manufacture of all leather, leather-trimmed, and sheep-lined garments for men, women, or children. The proposal for extension was based on evidence before the Department of Labor that the products were manufactured by substantially the same manufacturers as other commodities already subject to the determination and that the same minimum wages prevailed. Hourly rates are established at 42½ cents or \$17 for a week of 40 hours.

### *Tag Industry*

Prevailing minimum wages in the tag industry were raised from 33 cents (determination effective October 31, 1938)<sup>6</sup> to 40 cents an hour on and after September 23, 1941, by the Secretary's recent determination. In this industry it was found that the effect of the wage order under the Fair Labor Standards Act for the converted paper products industry, including tags, effective June 30, 1941,<sup>7</sup> had become the prevailing minimum wage, thereby making the present determination necessary.

### *Structural Clay Products Industry*

By an amendment which came into operation on October 27, 1941, the prevailing minimum wage for the structural clay products industry was raised from 30 cents an hour in the States of Maryland, Virginia, Kentucky, Tennessee, North Carolina, South Carolina, Georgia, Alabama, Mississippi, Florida, Louisiana, Arkansas, Oklahoma, Texas, New Mexico, and the District of Columbia to 34 cents (\$13.60 for a week of 40 hours). The 30-cent rate was fixed by determination effective January 10, 1941.<sup>8</sup> The determination also provided for a 40-cent rate in the remaining States, and this rate remains unaltered. Action by the Secretary in changing the rate of pay resulted from a wage order for the industry issued under the terms of the Fair Labor Standards Act, which became effective on September 1, 1941,<sup>9</sup> making the 34-cent rate the prevailing minimum.

<sup>5</sup> Monthly Labor Review, issue of October 1940 (p. 810).

<sup>6</sup> Idem. (p. 813).

<sup>7</sup> Monthly Labor Review, July 1941 (p. 170).

<sup>8</sup> Idem, February 1941 (p. 424).

<sup>9</sup> Idem, October 1941 (p. 990).

## *Labor Turn-Over*

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### LABOR TURN-OVER IN MANUFACTURING, AUGUST 1941

THE quit rate in manufacturing industries rose to an all-time high in August, according to the Bureau of Labor Statistics' monthly survey on labor turn-over. This record quit rate of 2.46 per 100 workers reflects widespread changes in employment opportunities arising from the demands of defense industries. Many workers are leaving jobs in order to secure employment in other industries offering higher wages, overtime pay, or better working conditions.

The August survey, covering nearly 8,000 plants employing 3,800,000 workers, showed continued high accession rates in strategic defense industries. The accession rate of all manufacturing industries combined dropped to 5.43 in August, largely as a result of reduced hiring in the electrical-machinery, planing-mill, rubber, cement, and several of the textile industries. The most striking change in accessions since 1940 is the decreasing ratio of rehiring. In the first 9 months of 1940 from two-fifths to a half of the accessions were persons rehired. This year the number rehired dropped to a quarter of the total number of accessions. The August figure was substantially below the 6.63 rate of August 1940, peak month for accessions since the defense program began. The resumption of automobile production on 1942 models was reflected in the accession rate of 16.81 in the automobile industry and 8.63 in automotive parts and equipment plants.

Lay-offs declined from 1.40 in July to 1.13 per 100 employees in August, largely as a result of fewer lay-offs in the automotive industry. The freezing of silk stocks caused a sharp increase in the number of lay-offs in the silk and rayon and knit-goods industries, particularly in hosiery plants. Shortages of raw materials also contributed to the rise in lay-off rates in some of the metal-consuming industries.

A slight increase was indicated in the discharge rate, which reached 0.30 in August—the highest level since August 1933. The discharge rate has been rising consistently in recent months, a fact which may be attributed largely to the release of new workers who have not proved satisfactory. The military separation rate (included under miscellaneous separations) for August was 0.14 as compared with 0.19 in July and 0.26 in June.

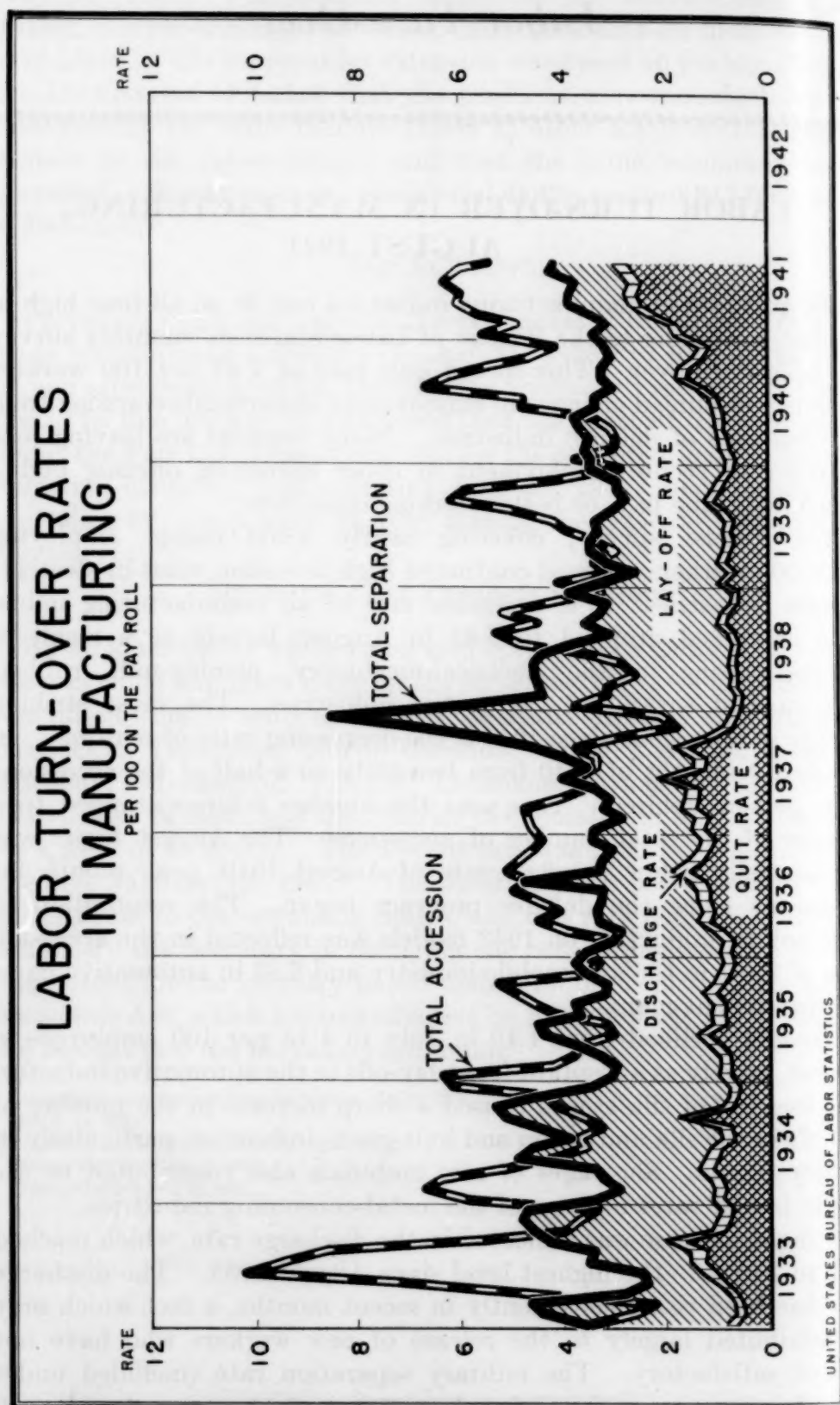


TABLE 1.—Monthly Labor Turn-Over Rates in Representative Factories in 135 Industries <sup>1</sup>

Class of turn-over and year	January	February	March	April	May	June	July	August	September	October	November	December	Average
<b>Separations:</b>													
Quits:													
1941.....	1.31	1.33	1.70	2.08	2.20	2.06	2.25	2.46					
1940.....	.63	.62	.67	.74	.77	.78	.85	1.10	1.37	1.31	1.10	0.99	0.91
Discharges:													
1941.....	.18	.19	.21	.25	.24	.26	.29	.30					
1940.....	.14	.16	.15	.13	.13	.14	.14	.16	.16	.19	.18	.16	0.15
Lay-offs: <sup>2</sup>													
1941.....	1.61	1.20	1.06	1.19	1.08	1.03	1.40	1.13					
1940.....	2.55	2.67	2.53	2.69	2.78	2.32	2.25	1.63	1.48	1.53	1.60	1.86	2.16
Miscellaneous separations:													
1941.....	.31	.43	.43	.37	.34	.36	.30	.25					
1940.....	.11	.11	.11	.10	.10	.12	.11	.11	.21	.20	.18	.15	.13
<b>Total:</b>													
1941.....	3.41	3.15	3.40	3.89	3.86	3.71	4.24	4.14					
1940.....	3.43	3.56	3.46	3.66	3.78	3.36	3.35	3.00	3.22	3.23	3.06	3.16	3.35
<b>Accessions:</b>													
Rehirings:													
1941.....	1.45	1.08	1.24	1.04	.92	.90	1.04	1.11					
1940.....	1.96	1.26	1.38	1.42	1.49	2.06	1.94	3.04	2.20	1.22	1.18	1.13	1.69
New hirings:													
1941.....	4.09	3.84	4.38	5.00	5.03	5.41	4.96	4.32					
1940.....	1.78	1.72	1.56	1.63	1.87	2.70	2.83	3.59	4.01	4.30	3.47	2.98	2.70
<b>Total:</b>													
1941.....	5.54	4.92	5.62	6.04	5.95	6.31	6.00	5.43					
1940.....	3.74	2.98	2.94	3.05	3.36	4.76	4.77	6.63	6.21	5.52	4.65	4.11	4.39

<sup>1</sup> The various turn-over rates represent the number of quits, discharges, lay-offs, total separations, and accessions per 100 employees.

<sup>2</sup> Including temporary, indeterminate, and permanent lay-offs.

<sup>3</sup> Beginning with September 1940, workers leaving to enter the Army or Navy are included in "miscellaneous separations."

TABLE 2.—Monthly Turn-Over Rates (per 100 Employees) in 39 Manufacturing Industries <sup>1</sup>

Industry	Date	Separation rates					Accession rates		
		Quit <sup>2</sup>	Discharge	Lay-off	Miscellaneous separation <sup>2</sup>	Total separation	Rehiring	New hiring	Total accession
Agricultural implements.....	Aug. 1941	1.31	0.26	0.47	0.21	2.25	0.51	2.03	2.54
	July 1941	1.24	.23	.71	.28	2.46	.51	2.75	3.26
	Aug. 1940	.73	.08	1.32	.14	2.27	2.63	2.34	4.97
Aircraft <sup>3</sup> .....	Aug. 1941	2.87	.52	.18	.18	3.75	.18	11.33	11.51
	July 1941	2.48	.47	.19	.22	3.36	.20	12.48	12.68
	Aug. 1940	2.96	.39	.30	.11	3.76	.15	7.76	7.91
Aluminum.....	Aug. 1941	3.47	.32	1.11	.70	5.60	1.89	8.60	10.49
	July 1941	2.09	.25	1.72	.60	4.66	2.36	2.97	5.33
	Aug. 1940	1.11	.11	1.12	.72	3.06	2.51	2.74	5.25
Automobiles and bodies.....	Aug. 1941	1.45	.14	4.10	.36	6.05	13.96	2.85	16.81
	July 1941	1.91	.18	14.34	.50	16.93	2.70	2.64	5.34
	Aug. 1940	.77	.07	2.47	.11	3.42	19.05	3.47	22.52
Automobile parts and equipment.....	Aug. 1941	2.39	.45	2.41	.27	5.52	1.88	6.75	8.63
	July 1941	1.96	.46	5.46	.35	8.23	1.75	4.32	6.07
	Aug. 1940	1.18	.23	1.80	.12	3.33	9.20	9.99	19.19
Boots and shoes.....	Aug. 1941	2.15	.20	1.13	.16	3.64	.58	3.01	3.59
	July 1941	1.98	.19	.76	.16	3.09	.85	4.00	4.85
	Aug. 1940	.82	.15	1.74	.10	2.81	1.29	1.43	2.72
Brass, bronze, and copper products.....	Aug. 1941	2.66	.39	1.84	.34	5.23	.63	4.01	4.64
	July 1941	2.54	.36	1.11	.41	4.42	1.31	4.31	5.62
	Aug. 1940	1.23	.13	1.15	.05	2.56	.90	5.04	5.94
Brick, tile, and terra cotta.....	Aug. 1941	2.75	.31	1.31	.16	4.53	.60	4.00	4.60
	July 1941	2.56	.34	1.10	.23	4.23	.41	4.99	5.40
	Aug. 1940	1.36	.15	2.14	.07	3.72	1.68	3.30	4.98

See footnotes at end of table.



TABLE 2.—Monthly Turn-Over Rates (per 100 Employees) in 39 Manufacturing Industries<sup>1</sup>—Continued

Industry	Date	Separation rates					Accession rates		
		Quit <sup>2</sup>	Discharge	Lay-off	Miscellaneous separation <sup>3</sup>	Total separation	Rehiring	New hiring	Total accession
Cast-iron pipe	Aug. 1941	2.08	0.48	1.10	0.25	3.91	0.79	2.44	3.23
	July 1941	1.45	.46	.23	.20	2.34	.96	2.94	3.90
	Aug. 1940	.61	.13	.59	.03	1.36	.08	2.36	2.44
Cement	Aug. 1941	1.31	.15	.65	.17	2.28	.22	2.12	2.34
	July 1941	1.10	.15	.44	.26	1.95	.33	4.27	4.60
	Aug. 1940	.31	.10	1.27	.16	1.84	2.19	2.02	4.21
Cigars and cigarettes	Aug. 1941	3.05	.12	.32	.13	3.62	4.04	4.13	8.17
	July 1941	3.11	.38	.81	.20	4.50	.66	3.57	4.23
	Aug. 1940	1.47	.10	.54	.21	2.32	1.33	5.36	6.69
Cotton manufacturing	Aug. 1941	4.15	.37	.78	.21	5.51	1.11	4.94	6.05
	July 1941	3.96	.36	.72	.31	5.35	1.09	5.10	6.19
	Aug. 1940	1.79	.25	1.80	.11	3.95	2.48	3.02	5.50
Dyeing and finishing	Aug. 1941	3.18	.37	.89	.23	4.67	.74	3.84	4.58
	July 1941	3.29	.38	.69	.25	4.61	1.25	5.42	6.67
	Aug. 1940	.87	.31	1.09	.11	2.38	2.80	1.69	4.49
Electrical machinery	Aug. 1941	2.05	.31	.91	.38	3.65	.39	4.19	4.58
	July 1941	1.61	.32	.33	.46	2.72	.34	6.02	6.36
	Aug. 1940	.87	.12	.80	.26	2.05	1.55	3.96	5.51
Foundries and machine shops	Aug. 1941	2.71	.48	.93	.27	4.39	.46	5.23	5.69
	July 1941	2.55	.46	.75	.27	4.03	.58	6.16	6.74
	Aug. 1940	.99	.19	.77	.09	2.04	1.03	4.04	5.07
Furniture	Aug. 1941	4.35	.49	.93	.27	6.04	.71	6.50	7.21
	July 1941	3.55	.45	.88	.38	5.26	.97	6.38	7.35
	Aug. 1940	1.32	.27	1.71	.08	3.38	1.44	3.61	5.05
Glass	Aug. 1941	1.80	.21	.78	.27	3.06	1.44	3.92	5.36
	July 1941	1.32	.13	2.04	.26	3.75	.63	3.90	4.53
	Aug. 1940	.73	.11	.66	.04	1.54	2.68	2.01	4.69
Hardware	Aug. 1941	3.87	.38	.65	.33	5.23	.40	4.66	5.06
	July 1941	3.90	.44	1.14	.30	5.78	.40	5.46	5.86
	Aug. 1940	1.62	.14	.71	.07	2.54	1.95	4.81	6.76
Iron and steel	Aug. 1941	1.50	.11	.24	.33	2.18	.33	2.39	2.72
	July 1941	1.18	.12	.20	.36	1.86	.56	2.97	3.53
	Aug. 1940	.71	.08	.45	.18	1.42	.83	2.88	3.71
Knit goods	Aug. 1941	2.80	.30	3.13	.13	6.36	.60	3.14	3.74
	July 1941	2.86	.33	.89	.16	4.24	.87	5.16	6.03
	Aug. 1940	1.03	.11	2.24	.01	3.39	2.04	2.10	4.14
Machine tools	Aug. 1941	2.55	.44	.20	.12	3.31	.08	4.92	5.00
	July 1941	2.02	.50	.12	.15	2.79	.13	5.04	5.17
	Aug. 1940	1.54	.25	.10	.08	1.97	.48	3.72	4.20
Men's clothing	Aug. 1941	1.84	.19	1.03	.12	3.18	.55	2.93	3.48
	July 1941	1.91	.18	.91	.11	3.11	1.22	3.43	4.65
	Aug. 1940	.95	.14	1.57	.08	2.74	2.56	3.44	6.00
Paints and varnishes	Aug. 1941	2.20	.21	1.30	.30	4.01	.16	2.75	2.91
	July 1941	1.82	.28	.90	.33	3.33	.22	3.85	4.07
	Aug. 1940	.87	.27	.51	.04	1.69	.77	2.06	2.83
Paper and pulp	Aug. 1941	1.84	.28	.68	.25	3.05	.34	3.50	3.84
	July 1941	1.43	.34	.53	.29	2.59	.31	3.93	4.24
	Aug. 1940	.96	.18	.81	.18	2.13	.52	1.48	2.00
Petroleum refining	Aug. 1941	.98	.10	.62	.20	1.90	.22	1.55	1.77
	July 1941	.49	.04	.42	.26	1.21	.48	1.87	2.35
	Aug. 1940	.60	.04	.87	.12	1.63	.74	1.20	1.94
Planing mills	Aug. 1941	3.85	.37	1.07	.20	5.49	.89	4.77	5.66
	July 1941	3.22	.46	1.00	.29	4.97	2.78	5.60	8.38
	Aug. 1940	1.62	.17	1.40	.04	3.23	1.45	3.67	5.12
Printing: Book and job	Aug. 1941	2.16	.25	2.77	.20	5.38	1.97	4.82	6.79
	July 1941	1.60	.15	1.87	.23	3.85	1.68	4.40	6.08
	Aug. 1940	.67	.18	2.51	.05	3.41	2.57	2.99	5.56
Printing: Newspapers and periodicals	Aug. 1941	.58	.08	1.22	.17	2.05	.69	1.69	2.38
	July 1941	.65	.43	1.86	.18	3.12	.55	1.19	1.74
	Aug. 1940	.41	.06	1.02	.05	1.54	1.09	1.56	2.65
Radios and phonographs	Aug. 1941	3.50	.38	.15	.14	4.17	1.46	7.33	8.79
	July 1941	2.73	.30	.66	.14	3.73	3.38	5.10	8.48
	Aug. 1940	1.86	.24	.57	.16	2.83	1.31	7.53	8.84
Rayon and allied products	Aug. 1941	.99	.19	1.03	.30	2.51	.93	1.82	2.75
	July 1941	.80	.17	.23	.31	1.51	.41	2.54	2.95
	Aug. 1940	.65	.10	.50	.01	1.26	.80	2.08	2.88

See footnotes at end of table.

TABLE 2.—Monthly Turn-Over Rates (per 100 Employees) in 39 Manufacturing Industries<sup>1</sup>—Continued

Industry	Date	Separation rates					Accession rates		
		Quit <sup>2</sup>	Dis-charge	Lay-off	Mis-cellaneous separation <sup>2</sup>	Total separation	Rehir-ing	New hir-ing	Total acces-sion
Rubber boots and shoes.....	Aug. 1941	2.91	0.19	1.11	0.54	4.75	0.76	2.41	3.17
	July 1941	2.67	.20	.37	.39	3.63	.43	4.76	5.19
	Aug. 1940	.92	.09	.56	.38	1.95	1.73	3.39	5.12
Rubber tires.....	Aug. 1941	1.72	.13	1.06	.45	3.36	.59	2.40	2.99
	July 1941	1.39	.13	.74	.40	2.66	.40	3.68	4.08
	Aug. 1940	.53	.04	.83	.07	1.47	1.64	2.48	4.12
Sawmills.....	Aug. 1941	4.29	.38	1.10	.38	6.15	1.18	5.70	6.88
	July 1941	3.61	.36	1.43	.32	5.72	1.29	6.43	7.72
	Aug. 1940	1.83	.15	1.18	.04	3.20	2.68	4.49	7.17
Shipbuilding.....	Aug. 1941	2.35	.46	2.05	.28	5.14	1.68	10.37	12.05
	July 1941	2.65	.59	2.05	.34	5.63	2.58	12.95	15.53
	Aug. 1940	1.29	.39	5.46	.07	7.21	1.78	7.41	9.19
Silk and rayon goods.....	Aug. 1941	3.57	.34	5.75	.20	9.86	.85	3.22	4.07
	July 1941	2.80	.29	.85	.14	4.08	.99	3.68	4.67
	Aug. 1940	1.08	.18	3.81	.06	5.13	2.15	2.48	4.63
Slaughtering and meat packing.....	Aug. 1941	2.10	.27	5.71	.33	8.41	4.60	5.01	9.61
	July 1941	1.68	.26	6.63	.40	8.97	5.20	4.58	9.78
	Aug. 1940	.86	.19	7.72	.25	9.02	4.95	1.47	6.42
Steam and hot-water heating apparatus.....	Aug. 1941	3.85	.36	.94	.46	5.61	.53	4.84	5.37
	July 1941	4.16	.48	.18	.49	5.31	1.70	5.71	7.41
	Aug. 1940	1.48	.29	.65	.05	2.47	.22	6.55	6.77
Structural and ornamental metal work.....	Aug. 1941	2.32	.32	.34	.45	3.43	.48	4.63	5.11
	July 1941	2.17	.34	1.21	.35	4.07	.25	5.54	5.79
	Aug. 1940	1.48	.11	2.89	.06	4.54	2.77	5.94	8.71
Woolen and worsted goods.....	Aug. 1941	3.47	.23	.79	.25	4.74	1.00	3.87	4.87
	July 1941	3.59	.28	.59	.27	4.73	1.21	5.22	6.43
	Aug. 1940	1.40	.23	4.41	.20	6.24	3.37	4.78	8.15

<sup>1</sup> No individual industry data shown unless reports cover at least 25 percent of industrial employment.<sup>2</sup> Beginning with September 1940, workers leaving to enter the Army or Navy are included in "miscellaneous separations."<sup>3</sup> Not including aeroengines.

# Building Operations

## SUMMARY OF BUILDING CONSTRUCTION IN PRINCIPAL CITIES, SEPTEMBER 1941<sup>1</sup>

BUILDING permit valuations in September for all classes of construction combined declined 5.6 percent from the August level. New residential construction, as measured by the value of permits issued, was 6.9 percent under the total for August and new nonresidential construction showed a decline of 0.8 percent. Permit valuations of additions, alterations, and repairs to existing structures dropped 10.8 percent from the preceding month.

As compared with September 1940 building permit valuations for all classes of construction combined showed a gain of 9.1 percent. Indicated expenditures for new residential construction increased 8.0 percent over the year period and the increase in new nonresidential construction amounted to 16.2 percent. Additions, alterations, and repairs to existing structures, however, were 2.3 percent below the level of September 1940.

### *Comparison of September 1941 with August 1941 and September 1940*

A summary of building construction in 2,129 identical cities in September 1941, with percentage changes from August 1941 and September 1940, is given in table 1.

TABLE 1.—*Summary of Building Construction for Which Permits Were Issued in 2,129 Identical Cities, September 1941*

Class of construction	Number of buildings			Permit valuation		
	September 1941	Percentage change from—		September 1941	Percentage change from—	
		August 1941	September 1940		August 1940	September 1940
All construction.....	85,571	-1.7	+5.4	\$242,984,950	-5.6	+9.1
New residential.....	27,643	-11.4	+4.5	133,425,312	-6.9	+8.0
New nonresidential.....	15,457	+5.3	+7.2	79,222,233	-.8	+16.2
Additions, alterations, and repairs.....	42,471	+3.1	+5.3	30,337,405	-10.8	-2.3

<sup>1</sup> More detailed information by geographic division and individual cities is given in a separate pamphlet entitled "Building Construction, September 1941," copies of which will be furnished upon request.

A summary of permit valuations and the number of family-dwelling units provided in new dwellings in 2,129 identical cities, having a population of 1,000 and over, is shown in table 2 for September 1941 with percentage changes from August 1941 and September 1940.

TABLE 2.—*Number and Permit Valuation of New Dwelling Units in 2,129 Identical Cities, September 1941, by Source of Funds and Type of Building*

Source of funds and type of dwelling	Number of dwelling units			Permit valuation		
	September 1941	Percentage change from—		September 1941	Percentage change from—	
		August 1941	September 1940		August 1941	September 1940
All dwellings.....	34,801	-4.8	+3.0	\$132,051,922	-7.0	+7.6
Privately financed.....	26,188	-9.4	-4.3	101,668,568	-10.3	+9.9
1-family.....	21,580	-12.2	+1.4	89,264,529	-12.5	+6.0
2-family <sup>1</sup> .....	2,135	+1.3	+15.0	5,914,043	+5.7	+29.7
Multifamily <sup>2</sup> .....	2,473	+10.3	-41.6	6,489,996	+13.9	-45.9
Publicly financed.....	8,613	+13.0	+34.1	30,383,354	+5.9	+38.5

<sup>1</sup> Includes 1- and 2-family dwellings with stores.

<sup>2</sup> Includes multifamily dwellings with stores.

### Construction During First 9 Months, 1940 and 1941

Cumulative totals for the first 9 months of 1941 compared with the same months of the preceding year are shown in table 3. The data are based on reports received from cities having a population of 1,000 and over.

TABLE 3.—*Permit Valuation of Building Construction, First 9 Months of 1940 and 1941, by Class of Construction*<sup>1</sup>

Class of construction	Permit valuation		
	First 9 months of—		Percentage change
	1941	1940	
All construction.....	\$2,136,135,028	\$1,760,495,226	+21.3
New residential.....	1,168,773,842	944,596,742	+23.7
New nonresidential.....	683,406,073	550,291,077	+24.2
Additions, alterations, and repairs.....	283,955,113	265,607,407	+6.9

<sup>1</sup> Based on reports from cities with a population of 1,000 and over, the cities being identical for any given month of both years.

Table 4 presents the permit valuation and number of family-dwelling units provided in cities with a population of 1,000 and over, for the first 9 months of 1940 and 1941.



TABLE 4.—*Number and Permit Valuation of New Dwelling Units, First 9 Months of 1940 and 1941, by Source of Funds and Type of Dwelling*<sup>1</sup>

Source of funds and type of dwelling	Number of dwelling units			Permit valuation		
	First 9 months of—		Per- cent- age change	First 9 months of—		Per- cent- age change
	1941	1940		1941	1940	
All dwellings.....	300,928	258,855	+19.7	\$1,155,914,025	\$927,192,460	+24.7
Privately financed.....	258,550	222,081	+16.4	985,000,361	815,075,636	+20.9
1-family.....	199,159	170,888	+16.5	819,747,112	671,620,868	+22.1
2-family <sup>2</sup> .....	17,363	13,369	+29.9	45,441,015	33,759,021	+34.6
Multifamily <sup>3</sup> .....	42,028	37,824	+11.1	119,872,234	109,695,747	+9.3
Publicly financed.....	51,378	36,774	+39.7	170,853,664	112,116,824	+52.4

<sup>1</sup> Based on reports from cities with a population of 1,000 and over, the cities being identical for any given month of both years.

<sup>2</sup> Includes 1- and 2-family dwellings with stores.

<sup>3</sup> Includes multifamily dwellings with stores.

### Analysis by Size of City, September 1941

Table 5 shows the value of permits issued for building construction in September 1941 with percentage changes from August 1941 and September 1940, by size of city and by class of construction.

TABLE 5.—*Permit Valuation of Various Classes of Building Construction in 2,129 Identical Cities, September 1941, by Size of City*

Size of city (census of 1940)	Number of cities reporting	Total construction			New residential buildings		
		Permit valuation, September 1941	Percentage change from—		Permit valuation, September 1941	Percentage change from—	
			August 1941	September 1940		August 1941	September 1940
Total, all reporting cities.....	2, 129	\$242, 984, 950	-5. 6	+9. 1	\$133, 425, 312	-6. 9	+8. 0
500,000 and over.....	14	54, 273, 785	-9. 2	-18. 7	33, 951, 614	-13. 3	-20. 7
100,000 and under 500,000.....	78	53, 596, 093	-26. 6	+4	31, 307, 369	+6	+30. 5
50,000 and under 100,000.....	106	57, 093, 729	+113. 8	+124. 1	14, 177, 398	-2	+10. 0
25,000 and under 50,000.....	190	25, 690, 731	-21. 9	-6. 3	16, 715, 953	+4. 5	+10. 9
10,000 and under 25,000.....	470	28, 313, 477	-29. 7	-4. 1	19, 579, 502	-24. 6	+31. 9
5,000 and under 10,000.....	419	12, 893, 099	-4. 1	+4. 9	9, 668, 541	-4	+8. 0
2,500 and under 5,000.....	429	8, 173, 348	+2. 1	+39. 4	6, 209, 189	+27. 0	+68. 2
1,000 and under 2,500.....	423	2, 950, 688	-8. 1	+42. 4	1, 815, 746	-23. 8	+42. 5

Size of city (census of 1940)	New nonresidential buildings			Additions, alterations, and repairs			Population (census of 1940)
	Permit valuation, September 1941	Percentage change from—		Permit valuation, September 1941	Percentage change from—		
		August 1941	September 1940		August 1941	September 1940	
Total, all reporting cities.....	\$79, 222, 233	-0. 8	+16. 2	\$30, 337, 405	-10. 8	-2. 3	64, 356, 100
500,000 and over.....	12, 376, 149	+20. 8	-9. 6	7, 946, 022	-23. 4	-22. 6	22, 367, 825
100,000 and under 500,000.....	15, 244, 413	-54. 3	-30. 3	7, 044, 311	-17. 7	-6. 0	15, 620, 164
50,000 and under 100,000.....	38, 314, 500	+360. 4	+313. 0	4, 601, 831	+10. 3	+38. 7	7, 274, 630
25,000 and under 50,000.....	4, 480, 553	-64. 0	-43. 1	4, 494, 225	+7	+6	6, 661, 855
10,000 and under 25,000.....	4, 806, 517	-53. 6	-58. 4	3, 927, 458	-7	+26. 4	7, 221, 195
5,000 and under 10,000.....	1, 869, 152	-19. 0	+4	1, 355, 406	-5. 4	-8. 1	2, 967, 279
2,500 and under 5,000.....	1, 319, 041	-43. 3	-12. 2	645, 118	-18. 6	-3. 5	1, 538, 983
1,000 and under 2,500.....	811, 908	+41. 0	+46. 7	323, 034	+28. 0	+32. 3	704, 169

The permit valuation and number of new dwelling units provided, by type of dwelling and size of city, in the 2,129 identical cities reporting for August and September 1941, are given in table 6.

TABLE 6.—Number and Permit Valuation of New Dwelling Units in 2,129 Identical Cities, September 1941, by Size of City and Type of Dwelling

Size of city (census of 1940)	Permit valuation of all housekeeping dwellings			Number of dwelling units in—							
	September 1941	August 1941	Percentage change	All dwellings <sup>1</sup>		Privately financed					
						1-family dwellings		2-family dwellings <sup>2</sup>		Multi-family dwellings <sup>3</sup>	
				Sep-tem-ber 1941	Aug-ust 1941	Sep-tem-ber 1941	Aug-ust 1941	Sep-tem-ber 1941	Aug-ust 1941	Sep-tem-ber 1941	Aug-ust 1941
Total all reporting cities.....	\$132, 051, 922	\$142, 002, 128	-7. 0	34, 801	36, 541	21, 580	24, 569	2, 135	2, 107	2, 473	2, 242
500,000 and over.....	33, 670, 914	39, 130, 010	-14. 0	9, 011	9, 757	4, 069	5, 134	1, 030	902	1, 512	720
100,000 and under 500,000.....	31, 115, 809	30, 991, 909	+4. 8	8, 358	8, 417	5, 404	5, 648	445	487	229	524
50,000 and under 100,000.....	14, 086, 198	14, 025, 330	+4. 3	3, 761	3, 733	2, 344	2, 621	201	251	268	349
25,000 and under 50,000.....	16, 172, 153	15, 257, 970	+6. 0	4, 283	3, 954	2, 839	3, 273	131	185	212	376
10,000 and under 25,000.....	19, 344, 002	25, 877, 224	-25. 2	5, 013	6, 616	3, 560	4, 009	156	151	189	224
5,000 and under 10,000.....	9, 655, 261	9, 660, 108	-1. 1	2, 336	2, 316	2, 029	2, 206	117	73	40	37
2,500 and under 5,000.....	6, 209, 189	4, 708, 382	+31. 9	1, 612	1, 173	921	1, 137	42	27	23	9
1,000 and under 2,500.....	1, 798, 396	2, 351, 195	-23. 5	427	575	414	541	13	31	0	3

<sup>1</sup> Includes dwelling units financed from public funds, for which information on type of dwelling is not available at the time these monthly tabulations are prepared.

<sup>2</sup> Includes 1- and 2-family dwellings with stores.

<sup>3</sup> Includes multifamily dwellings with stores.

The information on building permits issued is based on reports received by the Bureau of Labor Statistics from 2,129 identical cities having a population of 1,000 and over.

The information is collected by the Bureau of Labor Statistics from local building officials, except in the States of Illinois, Massachusetts, New Jersey, and Pennsylvania, where the State departments of labor collect and forward the information to the Bureau. In New York and North Carolina the information from the smaller cities is collected by the Bureau of Labor Statistics from local building officials and the information from the larger cities is collected and forwarded to the Bureau by the State departments of labor. The permit valuations shown in this report are estimates made by prospective builders on applying for permits to build. No land costs are included. Only building projects within the corporate limits of the cities enumerated are included in the Bureau's tabulation. The data collected by the Bureau of Labor Statistics show, in addition to private and municipal construction, the value of buildings for which contracts were awarded by the Federal and State governments in the cities included in the report. For September 1941 the value of these buildings amounted

to \$70,171,000, for August 1941 to \$57,210,000, and for September 1940 to \$49,545,000.

### Construction From Public Funds

The value of contracts awarded and force-account work started during September 1941, August 1941, and September 1940, on construction projects financed wholly or partially from various Federal funds is shown in table 7.

TABLE 7.—*Value of Contracts Awarded and Force-Account Work Started on Construction Projects Financed From Federal Funds, August and September 1941 and September 1940*<sup>1</sup>

Federal agency	Contracts awarded and force-account work started		
	September 1941	August 1941 <sup>2</sup>	September 1940 <sup>2</sup>
Total.....	\$287, 856, 765	\$406, 608, 973	\$2, 746, 671, 351
Public Works Administration:			
Federal.....	0	0	112, 513
Non-Federal:			
N. I. R. A.....	0	0	17, 050
E. R. A. A.....	0	0	1, 111, 394
P. W. A. A., 1938.....	0	0	1, 987, 541
Federal agency projects under the WPA.....	0	194, 951	2, 594, 956
Regular Federal appropriations.....	262, 383, 230	395, 416, 318	2, 717, 045, 666
United States Housing Authority.....	25, 473, 535	10, 997, 704	23, 802, 231

<sup>1</sup> Preliminary, subject to revision.

<sup>2</sup> Revised.

The value of public-building and highway-construction awards financed wholly from appropriations from State funds, as reported by the various State governments for September 1941, August 1941, and September 1940 is shown in the following statement:

	Public buildings	Highway construction
September 1941.....	\$931, 993	\$17, 113, 467
August 1941.....	1, 833, 324	13, 481, 347
September 1940.....	2, 603, 422	16, 627, 123

## Retail Prices

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### FOOD PRICES IN SEPTEMBER 1941

RETAIL costs of food rose 2.6 percent between August 12 and September 16, continuing the widespread advances since March of this year. The increase affected most of the foods important to moderate-income families, except fresh fruits and vegetables, which were selling at seasonally low levels. Prices of staple commodities such as bread, meat, milk, sugar, coffee, and canned goods were all quoted at higher levels. These advances at retail followed earlier rapid rises in wholesale markets, which in turn reflected a variety of influences, including Government purchases, increased domestic consumer demand, higher costs of production, and some speculative buying. In the last 2 weeks of September, according to preliminary reports, the rise in retail prices was at a much slower rate than in the previous month, as wholesale prices moved downward.

The Bureau's index of retail food costs for September 16, 1941, was 110.8 percent of the 1935-39 average, or 14 percent higher than for September 1940. The rise has been particularly rapid since March of this year, amounting to 12.6 percent for the 6 months ending September 16. Outstanding increases since last September were 57 percent for lard; 30 percent for pork; and 20 to 30 percent for such foods as butter, cheese, evaporated milk, eggs, canned peaches, navy beans, and coffee. Only 1 of 54 foods was selling for less in September 1941 than a year earlier.

#### *Details by Commodity Groups*

Between August 12 and September 16 bread prices rose by 0.5 to 1.5 cents per pound in 11 cities, thus bringing to 41 the number of cities covered by the surveys of the Bureau in which prices of bread have advanced since July 15. In general, the increase has been 1 cent per loaf with no change in the weight of the loaf, although in some cities the price has remained the same but weights have been reduced by from 1 to 6 ounces per loaf. Reports indicate that higher bread prices have followed increased cost of ingredients. Flour prices at retail moved up 1.9 percent between mid-August and mid-September. On September 16 the price of flour was 18.5 percent higher than a year ago, most of the rise having occurred since March 1941. Prices of other cereals and bakery products, such as corn meal



and soda crackers, advanced slightly during the month, while prices of macaroni and vanilla cookies were unchanged. As a group, cereals and bakery products were 1.9 percent higher than last month.

Meats, which account for about 30 percent of the food costs of the average city family, advanced 3.9 percent between mid-August and mid-September. Pork prices maintained a seasonal rise, and lamb and beef also moved up to high late summer levels on September 16. For the past several months pork prices have been consistently above their relatively low 1940 level, when marketings were unusually heavy, and on September 16 they were 30 percent higher than a year earlier, although less than 15 percent above the 5-year average, 1935-39. Beef prices were only 3 percent above those for a year ago and lamb and chickens 6 to 10 percent higher. Particularly sharp increases were reported for canned salmon, with many retailers reporting acute shortages of red salmon because of Government purchases. Prices of pink salmon were 6 percent and red salmon 10 percent above those of last month. As compared with a year ago, pink salmon was 26 percent and red salmon 30 percent higher this September. Prices of fresh and frozen fish were up 3 percent for the month and 11 percent for the year.

Prices of dairy products as a whole advanced 3.5 percent between August 12 and September 16, with the various items in the group moving up at similar rates. Fresh milk prices, which began to rise in a few cities in May and June, advanced 1 to 3 cents a quart in other cities in July, August, and September, and on September 16 were higher than in mid-May in 41 out of 51 cities. Prices of butter, cheese, and evaporated milk rose in nearly all cities between mid-August and mid-September, following earlier rises in wholesale markets. The usual seasonal increase in milk prices has been accentuated by the drought in some of the dairy States, increased consumer demand, and large purchases under the Lease-Lend Act. These purchases have also affected egg prices, which were 26 percent higher in September 1941 than in September 1940. The 10-percent rise between mid-August and mid-September, however, was mostly seasonal in character.

Prices of fresh fruits and vegetables, which have been declining seasonally since June, were 4 percent lower on September 16 than on August 12. Prices of oranges, cabbage, lettuce, onions, potatoes, spinach, and sweetpotatoes were all lower, while green beans and carrots were higher. Prices of apples and bananas remained unchanged for the month. Fresh fruits and vegetables as a whole were 11.4 percent above a year ago, with higher prices reported for all items in the group except apples and sweetpotatoes, which were selling for the same prices as a year earlier. Smaller supplies this year of potatoes, cabbage, lettuce, green beans, and onions, together with increased demand, resulted in prices ranging from 14 to 36

percent above those in September 1940. Prices of spinach and carrots were only slightly higher than a year earlier, while prices of oranges and bananas were 12.5 percent above those of a year ago, reflecting the higher auction prices of California Valencia oranges this year and a tight shipping situation for bananas.

Canned and dried fruits and vegetables continued to advance by about 2.0 percent between August 12 and September 16, with the exception of canned peaches, which rose 7.3 percent during the month. Prices of canned goods were 12 percent higher than in September 1940, due mainly to a 23-percent increase for canned peaches and a 14-percent advance for canned tomatoes, both of which are being purchased in large quantities by the Government and by domestic consumers. Prices of prunes were 3 percent higher than a year ago, and navy beans were 21 percent above the September 1940 price.

Coffee prices, which have been advancing steadily since December of last year, rose 5.8 percent between August 12 and September 16. There has been an increase of slightly more than 5 cents per pound from the low average of 20.5 cents per pound in December 1940, and coffee prices on September 16 were higher than at any time since November 1937. Shipping difficulties and minimum price levels set by the coffee-producing countries have been responsible to a large extent for the rise in coffee prices. Tea prices were up 2.7 percent for the month and 9.1 percent for the year.

Fats and oils as a group rose 3.8 percent between mid-August and mid-September, with price increases ranging from 2.2 percent for salad dressing to 5.2 percent for shortening in containers other than cartons. The increase for fats and oils, which began in December 1940 following advances in wholesale markets, amounted to 28.6 percent by September 16. Lard and shortening have been responsible for most of the rise, as prices of lard increased 57 percent and shortening, packed in cartons, 45.7 percent since September 1940. Increases for the year for other items in the group ranged from 6 to 19 percent.

Sugar prices continued to rise, reflecting shipping difficulties and some speculative activity during the past year. Sugar prices on September 16 were 2.6 percent above those of August 12, and 17.9 percent higher than a year earlier.

Indexes of retail costs of food for September, August, and July, 1941 and for selected months in 1940, 1939, and 1929 are presented in table 1. This table shows the present and recent levels of food costs compared with a year ago, with costs prevailing before the outbreak of the European war, and with the level of August 1929. The accompanying chart shows the trend in costs of all foods (1935-39=100) and of each major commodity group for the period January 1929 to September 1941, inclusive.

## RETAIL COST OF FOOD

1935-39 = 100

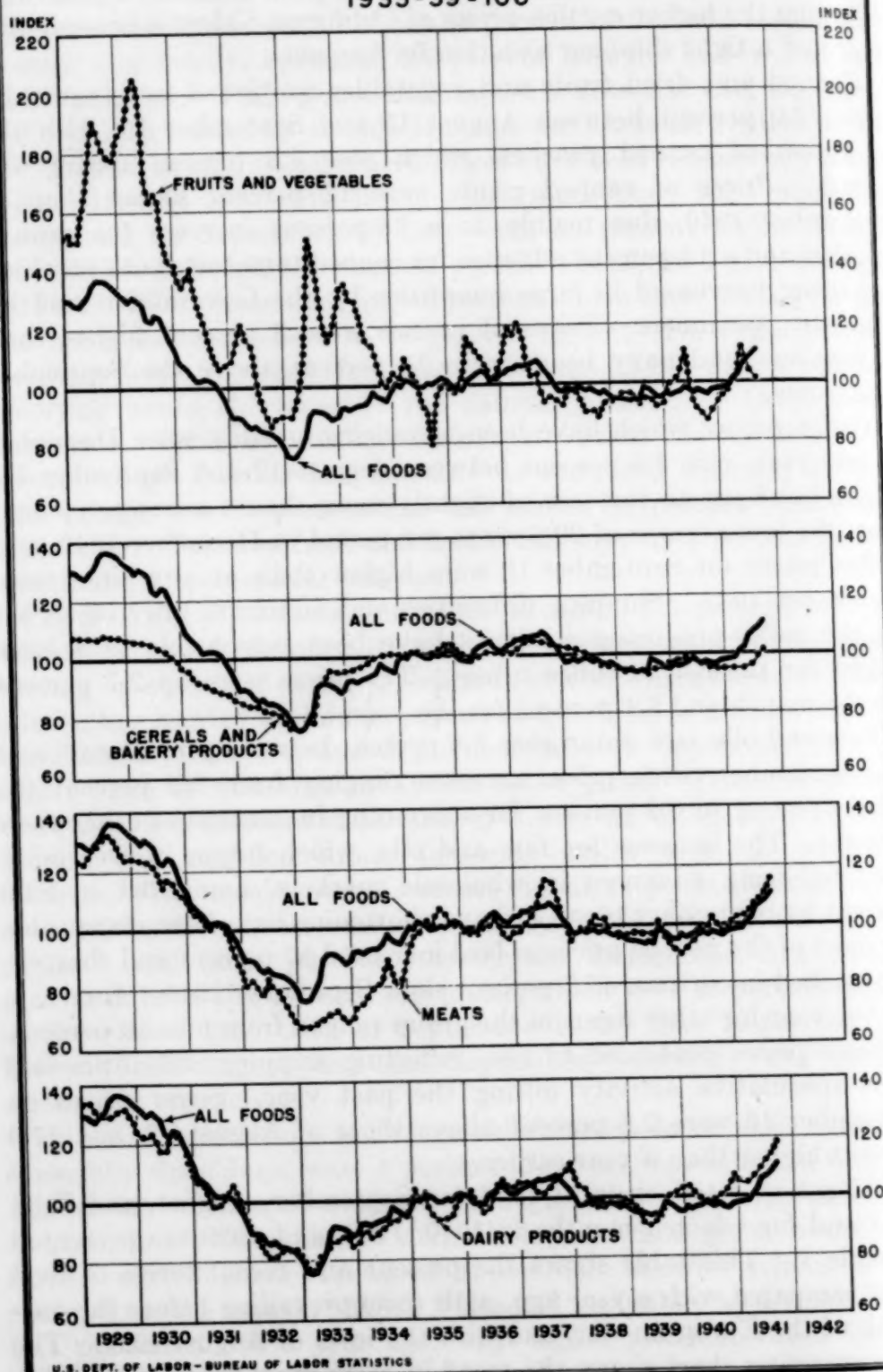


TABLE 1.—*Indexes of Retail Costs of Food in 51 Large Cities Combined,<sup>1</sup> by Commodity Groups, September, August, and July 1941, September 1940, August 1939, and June 1929*

[1935-39=100]

Commodity group	1941			1940	1939	1929
	Sept. 16 <sup>2</sup>	Aug. 12	July 15	Sept. 17	Aug. 15	June 15
All foods.....	110.8	108.0	106.7	97.2	93.5	131.3
Cereals and bakery products..	100.9	99.0	96.2	96.2	93.4	107.1
Meats.....	115.5	111.2	108.7	102.4	95.7	129.4
Beef and veal.....	116.2	112.1	108.6	111.4	99.6	(*)
Pork.....	114.8	109.5	106.1	88.1	88.0	(*)
Lamb.....	116.3	<sup>3</sup> 109.6	111.5	105.4	98.8	(*)
Chickens.....	103.1	103.1	104.5	96.6	94.6	(*)
Fish, fresh and canned.....	129.9	125.5	120.4	110.8	99.6	(*)
Dairy products.....	118.5	114.5	112.3	99.7	93.1	129.0
Eggs.....	132.9	120.7	114.7	105.7	90.7	121.8
Fruits and vegetables.....	100.7	103.4	107.0	90.4	92.4	168.6
Fresh.....	99.6	103.8	109.3	89.4	92.8	173.1
Canned.....	102.5	<sup>3</sup> 100.2	97.9	91.9	91.6	126.0
Dried.....	111.1	109.1	106.5	100.5	90.3	168.9
Beverages.....	109.2	103.8	101.4	91.1	94.9	165.5
Fats and oils.....	103.0	99.2	96.6	81.3	84.5	127.5
Sugar.....	111.8	109.0	107.8	94.8	95.6	110.8

<sup>1</sup> Aggregate costs of 54 foods in each city, weighted to represent total purchases of families of wage earners and lower-salaried workers, have been combined with the use of population weights.

<sup>2</sup> Preliminary.

<sup>3</sup> Revised.

<sup>4</sup> Not available.

Among the 54 foods included in the index, prices of 39 were higher in September 1941 than in August, prices of 7 were lower, and for 8 there was no change. Compared with a year ago, prices for September 1941 were higher for 50 foods, lower for 1, and 3 remained the same.

Average prices of each of 63 foods for 51 cities combined are shown in table 2 for September and August 1941 and September 1940.

TABLE 2.—*Average Retail Prices of 63 Foods in 51 Large Cities Combined, September and August 1941 and September 1940*

Article	1941		1940
	Sept. 16 <sup>1</sup>	Aug. 12	Sept. 17
Cereals and bakery products:			
Cereals:			
Flour, wheat.....10 pounds.....	Cents 47.5	Cents 46.6	Cents 40.1
Macaroni.....pound.....	13.8	13.8	13.9
Wheat cereal <sup>2</sup> .....28-ounce package.....	23.5	23.6	23.6
Corn flakes.....8-ounce package.....	7.1	7.1	7.0
Corn meal.....pound.....	4.4	4.3	4.2
Rice <sup>2</sup> .....do.....	9.1	8.9	7.9
Rolled oats <sup>2</sup> .....do.....	7.2	7.1	7.2
Bakery products:			
Bread, white.....do.....	8.5	8.3	8.1
Bread, whole-wheat.....do.....	9.2	9.0	9.0
Bread, rye.....do.....	9.5	9.5	9.4
Vanilla cookies.....do.....	25.6	25.6	24.9
Soda crackers.....do.....	15.1	15.0	15.1
Meats:			
Beef:			
Round steak.....do.....	41.5	40.3	40.3
Rib roast.....do.....	32.0	30.9	31.7
Chuck roast.....do.....	26.7	25.4	25.5
Veal: Cutlets.....do.....	50.2	48.4	45.0

See footnotes at end of table.



TABLE 2.—Average Retail Prices of 63 Foods in 51 Large Cities Combined, September and August 1941 and September 1940—Continued

Article	1941		1940
	Sept. 16 <sup>1</sup>	Aug. 12	Sept. 17
<b>Meats—Continued.</b>			
Pork:			
Chops.....pound..	Cents 41.5	Cents 38.4	Cents 32.9
Bacon, sliced.....do..	36.6	36.0	27.6
Ham, sliced <sup>2</sup> .....do..	54.1	52.5	44.6
Ham, whole.....do..	34.2	33.3	25.4
Salt pork.....do..	20.3	20.0	15.0
Lamb:			
Leg.....do..	32.4	<sup>3</sup> 29.7	29.3
Rib chops.....do..	41.5	40.1	37.8
Poultry: Roasting chickens.....do..	32.9	32.9	31.0
Fish:			
Fresh, frozen.....do..	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
Salmon, pink.....16-ounce can..	19.8	18.7	15.7
Salmon, red <sup>2</sup> .....do..	33.7	30.6	25.9
<b>Dairy products:</b>			
Butter.....pound..	43.5	42.2	34.3
Cheese.....do..	32.7	31.3	25.7
Milk, fresh (delivered).....quart..	14.3	13.8	12.7
Milk, fresh (store).....do..	13.2	12.8	11.3
Milk, fresh (delivered and store) <sup>2</sup> .....do..	13.9	13.4	12.3
Milk, evaporated.....14½-ounce can..	8.4	8.2	7.0
Eggs.....doz..	46.9	42.7	37.2
<b>Fruits and vegetables:</b>			
Fresh:			
Apples.....pound..	4.7	4.7	4.7
Bananas.....do..	7.2	7.2	6.4
Oranges.....dozen	34.1	35.2	30.3
Beans, green.....pound..	9.7	9.1	7.7
Cabbage.....do..	3.8	4.2	2.8
Carrots.....bunch	5.3	5.1	5.1
Lettuce.....head	9.4	9.9	8.2
Onions.....pound..	4.2	4.4	3.6
Potatoes.....15 pounds..	32.8	34.1	28.8
Spinach.....pound..	8.0	9.7	7.9
Sweetpotatoes.....do..	4.3	5.7	4.3
Canned:			
Peaches.....No. 2½ can..	20.7	19.3	16.8
Pineapple.....do..	21.9	21.6	20.9
Beans, green <sup>2</sup> .....No. 2 can..	11.1	10.9	9.8
Corn.....do..	11.8	11.8	10.5
Peas.....do..	13.7	13.6	13.5
Tomatoes.....do..	9.6	9.4	8.4
Dried:			
Prunes.....pound..	10.0	9.8	9.7
Navy beans.....do..	8.0	7.8	6.6
<b>Beverages:</b>			
Coffee.....do..	25.7	24.3	20.8
Tea.....½ pound..	19.1	18.6	17.5
Cocoa <sup>2</sup> .....8-ounce can..	9.1	9.1	9.1
<b>Fats and oils:</b>			
Lard.....pound..	14.6	14.0	9.3
Shortening, other than lard:			
In cartons.....do..	16.9	16.1	11.6
In other containers.....do..	22.1	21.0	18.6
Salad dressing.....pint..	22.9	22.4	20.6
Oleomargarine.....pound..	18.0	17.2	15.8
Peanut butter.....do..	18.9	18.3	17.8
<b>Sugar and sweets:</b>			
Sugar.....10 pounds..	60.0	58.5	51.0
Corn sirup <sup>2</sup> .....24-ounce can..	14.0	14.0	13.5
Molasses <sup>2</sup> .....18-ounce can..	13.5	<sup>3</sup> 13.5	13.4

<sup>1</sup> Preliminary.<sup>2</sup> Not included in index.<sup>3</sup> Revised.<sup>4</sup> Composite prices not computed.

### Details by Regions and Cities

Retail food prices advanced more than 3 percent in 13 of 51 cities between mid-August and mid-September. The largest increases were for Chicago (5.7 percent), Kansas City (5.4 percent), Portland, Oreg. (4.9 percent), and St. Louis (4.7 percent). Greater than average advances for dairy products, fats and oils, cereals and bakery

products, and higher prices for fruits and vegetables were responsible for the large increases in these 4 cities. Advances of less than 1 percent were reported for only 3 cities: Rochester (0.8 percent), and Cincinnati and Jacksonville (0.9 percent). The greatest increases since September of last year were in Mobile (19.5 percent), Portland, Oreg. (19.3 percent), and Kansas City (19.2 percent). The smallest increases over the same period were reported in Newark (10.1 percent), and New York and Salt Lake City (10.8 percent).

Indexes of food costs by cities are presented in table 3 for September and August 1941 and September 1940.

TABLE 3.—Indexes of the Average Retail Cost of All Foods, by Cities,<sup>1</sup> September and August 1941 and September 1940

[1935-39=100]

Region and city	1941		1940	Region and city	1941		1940
	Sept. 16 <sup>2</sup>	Aug. 12	Sept. 17		Sept. 16 <sup>2</sup>	Aug. 12	Sept. 17
United States.....	110.8	108.0	97.2	South Atlantic:			
New England:				Atlanta.....	110.0	<sup>4</sup> 107.0	94.7
Boston.....	108.4	107.3	96.8	Baltimore.....	113.1	109.6	96.4
Bridgeport.....	110.2	108.4	97.7	Charleston, S. C.....	110.9	107.9	96.3
Fall River.....	109.5	107.1	97.9	Jacksonville.....	114.6	113.6	101.4
Manchester.....	110.4	108.4	98.7	Norfolk <sup>3</sup> .....	113.1	110.8	95.2
New Haven.....	108.5	107.2	97.2	Richmond.....	109.9	107.5	93.1
Portland, Maine.....	109.2	<sup>4</sup> 107.9	<sup>4</sup> 97.6	Savannah.....	116.4	114.8	99.5
Providence.....	111.0	108.9	99.2	Washington, D. C.....	110.5	<sup>4</sup> 107.4	96.9
Middle Atlantic:				East South Central:			
Buffalo.....	114.1	111.8	98.7	Birmingham.....	109.0	106.8	<sup>4</sup> 94.6
Newark.....	109.4	108.0	99.4	Louisville.....	110.9	107.8	94.6
New York.....	109.8	107.8	99.1	Memphis.....	110.6	<sup>4</sup> 106.4	93.0
Philadelphia.....	107.5	104.7	93.8	Mobile.....	115.8	112.3	<sup>4</sup> 96.9
Pittsburgh.....	112.1	109.0	97.0	West South Central:			
Rochester.....	111.1	110.2	99.5	Dallas.....	106.3	103.8	92.8
Scranton.....	110.3	<sup>4</sup> 108.8	97.1	Houston.....	113.1	109.5	99.7
North Central:				Little Rock.....	109.8	<sup>4</sup> 108.2	93.5
Chicago.....	114.3	108.1	97.6	New Orleans.....	117.4	114.7	101.9
Cincinnati.....	110.0	<sup>4</sup> 109.0	96.6	Mountain:			
Cleveland.....	114.1	112.1	100.4	Butte.....	109.0	107.4	97.7
Columbus, Ohio.....	107.6	104.4	92.1	Denver.....	107.4	<sup>4</sup> 106.0	92.9
Detroit.....	108.9	107.1	96.0	Salt Lake City.....	109.1	<sup>4</sup> 106.9	98.5
Indianapolis.....	111.3	108.5	96.7	Pacific:			
Milwaukee.....	109.2	107.1	95.1	Los Angeles.....	111.9	109.3	97.8
Peoria.....	115.2	111.0	98.7	Portland, Oreg.....	119.9	<sup>4</sup> 114.3	100.5
Springfield, Ill.....	111.9	<sup>4</sup> 107.4	97.7	San Francisco.....	111.1	<sup>4</sup> 108.3	97.9
West North Central:				Seattle.....	117.0	112.2	100.1
Kansas City.....	107.3	101.8	90.0				
Minneapolis.....	112.0	110.0	97.1				
Omaha.....	108.2	105.7	97.3				
St. Louis.....	114.5	109.4	96.9				
St. Paul.....	108.2	<sup>4</sup> 104.7	95.0				

<sup>1</sup> Aggregate costs of 54 foods in each city, weighted to represent total purchases of families of wage earners and lower-salaried workers, have been combined for the United States with the use of population weights. Primary use is for time-to-time comparisons rather than place-to-place comparisons.

<sup>2</sup> Preliminary.

<sup>3</sup> Includes Portsmouth and Newport News.

<sup>4</sup> Revised.

## ELECTRICITY AND GAS

### Price Changes Between June and September 1941

RESIDENTIAL rates are secured from 51 cities for electricity and from 50 cities for gas. These rates are used in the computation of

monthly bills for the amounts of consumption which have been selected as representative of average use throughout the country.

Prices of electricity are based upon the use of 25 kilowatt-hours for lighting and small energy-consuming appliances; 100 kilowatt-hours for greater use of lighting and small appliances, and an electric refrigerator; and 250 kilowatt-hours for a still greater use of lighting, a large number of small appliances, an electric refrigerator, and an electric range.

Prices of gas are based upon the use of 10.6 therms for a range; 19.6 therms for range and manual-type water heater; 30.6 therms for range and automatic storage or instantaneous water heater; and 40.6 therms for range, automatic water heater, and gas refrigerator.

Quarterly reports published in March, June, and September show changes for the preceding 3 months. The December report presents prices effective on the 15th of December and a summary of all changes during the year.

#### ELECTRICITY

Rate reductions between June and September 1941 occurred in two cities. In Philadelphia the change affected all customers using more than 12 kilowatt-hours per month. The decreases were approximately 2 percent for 25 kilowatt-hours, 7 percent for 100 kilowatt-hours, and 5 percent for 250 kilowatt-hours. In Detroit, a reduction in the rate for the first 10 kilowatt-hours used per month provided the greatest decrease to customers using relatively small amounts of electricity. The reductions amounted to 6.5 percent for 25 kilowatt-hours, 2.9 percent for 100 kilowatt-hours, and 1.3 percent for 250 kilowatt-hours. In New York City, customers' bills reflected the decrease from 3 to 2 percent in the city's sales tax.

#### GAS

Between June and September 1941 Manchester, N. H., was the only city covered by the Bureau in which a rate change occurred. A single rate schedule, with a separate provision covering minimum bills for various appliances such as automatic water heaters, replaced the two rate schedules formerly available to domestic customers (a general service rate and an optional rate for customers using gas for automatic water heating). Under the new rate schedule, monthly bills increased about 9 percent for 10.6 therms and a little more than 8 percent for 30.6 and 40.6 therms. In contrast, the cost for 19.6 therms decreased 3.7 percent.

One company in Houston, serving about 70 percent of the customers, reported a slightly lower heating value of the gas which resulted in advances of less than 1 percent. In New York City, costs of gas were 1 percent lower as the result of a decrease in the city's sales tax.

## Wholesale Prices

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### WHOLESALE PRICES IN SEPTEMBER 1941<sup>1</sup>

THE Bureau of Labor Statistics comprehensive index of nearly 900 series priced in wholesale markets rose 1.7 percent from August to September, the highest level since January 1930. Further advances in prices for agricultural products contributed most of the advance. The all-commodity index is 17.7 percent above a year ago and more than 22 percent above the low level of August 1939 preceding the war outbreak of the war.

The upward movement in commodity prices was quite general but most marked in agricultural commodity markets. This advance will, no doubt, be reflected later in nondurable consumers' goods. Prices of farm products rose 4.1 percent and foods advanced 2.6 percent during the month. Housefurnishing goods rose 1.9 percent; miscellaneous commodities, 1.7 percent; and textile products and chemicals and allied products, 1.6 percent. Hides and leather products advanced 1 percent; building materials, 0.9 percent; and fuel and lighting materials, 0.3 percent. The index for metals and metal products remained unchanged at the August level.

Average wholesale prices of raw materials advanced 2.7 percent and were 27.7 percent above a year ago. Semimanufactured commodities rose 0.9 percent and manufactured products, 1.4 percent, and were 16.4 and 13.9 percent above the September 1940 level.

Commodity prices generally are considerably higher than they were a year ago. In the year period, September 1940 to September 1941, farm products have risen 37.5 percent; foods, 25.2 percent; and textile products, 23.7 percent. Hides and leather products, and chemicals and allied products have advanced over 13 percent during the year; building materials and fuel and lighting materials and miscellaneous commodities, more than 11 percent; and housefurnishing goods, nearly 10 percent. Metals and metal products are only 3.4 percent higher than they were a year ago, largely as a result of governmental action taken to control prices of these materials.

Other important changes have been increases of over 128 percent for industrial fats and oils; 66 percent for cattle feed; 50 percent for cotton goods; and from 30 to 40 percent for grains, livestock, "other farm products" (which includes cotton and wool), "other foods"

<sup>1</sup> More detailed information on wholesale prices is given in the Wholesale Price pamphlet which will be furnished upon request.



(particularly lard, cocoa, coffee, and pepper), "other textile products" (such as burlap, hemp, and jute), and hides and skins. Dairy products, meats, woolen and worsted goods, petroleum products, and lumber were more than 20 percent higher than a year ago.

The rapid rise in prices for farm products continued as sharp gains were reported in the grain and livestock markets. Led by advances of 20 percent for oats and 25 percent for barley, grain prices rose 7.2 percent. Prices for rye were up nearly 10 percent; wheat, 7 percent; and corn, about 1 percent. Livestock and poultry increased 2.1 percent as a result of higher prices for calves, sheep, hogs, and live poultry. Cows and steers declined fractionally. Prices for cotton rose 6.3 percent and wool also advanced. In addition quotations were higher for hay, seeds, tobacco, potatoes, onions, and apples, and for eggs, fresh milk at Chicago, and hops. In the past 7 months farm-product prices have risen more than 29 percent.

Average prices for foods in wholesale markets advanced 2.6 percent to the highest level in over 11 years. Cereal products were 5.3 percent higher than a month ago. This increase was in large part due to a sharp advance in bread prices in the New York market. However, prices for flour and oatmeal also advanced. Prices for dairy products continued to rise. Butter and cheese were more than 3 percent higher than a month ago and quotations were also higher for powdered and evaporated milk. Meats, particularly pork, veal, and dressed poultry, rose 1.9 percent. Prices were lower for beef, lamb, and mutton. Canned and dried fruits and vegetables continued to advance, while citrus fruits declined. Further advances were reported in prices for edible fats and oils (including lard, oleo oil, and edible tallow) and for most vegetable oils and vinegar. Cocoa beans, coffee, canned salmon, molasses, and cornstarch also averaged higher. Pepper, sugar, tea, and olive oil declined.

Hides and leather products averaged 1 percent higher than a month ago as a result of advancing prices for leather and leather manufactures, such as shoes, belting, harness, and luggage.

The uptrend in prices for textile products continued unabated as woolen and worsted goods rose 3.3 percent and cotton goods advanced 2.7 percent. Smaller increases were reported for clothing, hosiery and underwear, and rayon. Prices were higher for men's overcoats, topcoats, and suits, and for overalls, handkerchiefs, shirts, shorts, and union suits. Cotton goods, such as denims, drills, duck, osnaburg, ticking, tire fabrics, toweling, yarns, broadcloth, damask, flannel, muslin, sateen, and sheeting, were higher than a month ago. Women's dress goods, suitings, and overcoating also advanced. Prices were higher too for viscose rayon yarns, raw jute, sisal, thread, and cordage.

Prices for most fuels averaged higher. Anthracite rose 1.4 percent; bituminous coal, 0.8 percent; and petroleum products, including

kerosene, gasoline, and fuel oil, advanced 0.5 percent. Prices for Pennsylvania crude oil dropped 2 percent during the month.

Metals and metal products remained comparatively steady under the influence of Government regulation of prices for most primary and scrap materials. Farm machinery and small tools averaged slightly higher than for a month ago as did also certain plumbing and heating equipment. Quicksilver advanced fractionally while pig tin and babbitt metals declined.

Prices for many building materials advanced during the month. Brick and tile and cement rose fractionally. Lumber advanced 1.3 percent, because of higher quotations for most types of Douglas fir and western pine and for birch, gum, oak, spruce, redwood, and yellow pine drop siding, dimension, and lath. Quotations for yellow pine boards, finish, flooring, and timbers and for sugar pine and cypress were lower. Prepared paints as well as most important paint materials advanced. Prices for gravel, lime, roofing slate, sand, tar, and prepared roofing were higher than in August.

Higher prices were reported for a wide range of chemicals, including oleic and stearic acid, and for alcohol, arsenic, carbon bisulphide and tetrachloride, chlorine, cream of tartar, glycerin, logwood extract, salt cake, phosphate, sulphide, and zinc chloride. Quotations were also higher for tartaric acid, camphor, castor oil, and for fertilizer materials such as cottonseed meal, fish scrap, sodium nitrate, and tankage. A further rise of 4.6 percent in prices for the industrial grades of fats and oils makes this group nearly 129 percent higher than it was a year ago although the index is at 91.3 percent of the 1926 level.

Average wholesale prices of both furniture and furnishings continued to rise as higher prices were reported for bedding, stoves, sewing machines, tableware, and for most types of both metal and wooden furniture.

The sharp advance in grain prices during the past was reflected in a 16-percent rise in prices for cattle feed. Paper and pulp rose during the month and quotations were also higher for batteries, matches, asbestos pipe covering, cylinder oil, paraffin wax, and soap.

Crude-rubber prices dropped 1.5 percent during the month as the Rubber Reserve Co. price dominated the market and supplies of free rubber dwindled.

Index numbers for the groups and subgroups of commodities for August and September 1941 and September 1940 and the percentage changes from a month ago and a year ago are shown in table 1.

TABLE 1.—Index Numbers of Wholesale Prices by Groups and Subgroups of Commodities, September 1941 With Comparisons for August 1941 and September 1940

[1926=100]

Group and subgroup	Sep- tember 1941	August 1941	Change from a month ago	Sep- tember 1940	Change from a year ago
			Percent		Percent
<b>All commodities</b> .....	<b>91.8</b>	<b>90.3</b>	<b>+1.7</b>	<b>78.0</b>	<b>+17.7</b>
<b>Farm products</b> .....	<b>91.0</b>	<b>87.4</b>	<b>+4.1</b>	<b>66.2</b>	<b>+37.3</b>
Grains.....	85.3	79.6	+7.2	61.7	+38.2
Livestock and poultry.....	101.1	99.0	+2.1	72.4	+39.6
Other farm products.....	86.0	82.0	+4.9	63.2	+36.1
<b>Foods</b> .....	<b>89.5</b>	<b>87.2</b>	<b>+2.6</b>	<b>71.5</b>	<b>+25.2</b>
Dairy products.....	93.3	90.3	+3.3	75.1	+24.2
Cereal products.....	85.8	81.5	+5.3	76.0	+12.9
Fruits and vegetables.....	70.7	70.3	+6	60.8	+16.3
Meats.....	99.4	97.5	+1.9	79.0	+25.8
Other foods.....	86.5	84.4	+2.5	62.6	+38.2
<b>Hides and leather products</b> .....	<b>111.3</b>	<b>110.2</b>	<b>+1.0</b>	<b>98.3</b>	<b>+13.3</b>
Shoes.....	117.1	116.1	+1.0	107.0	+9.4
Hides and skins.....	112.1	112.2	—	84.0	+33.5
Leather.....	100.0	98.5	+1.5	88.9	+12.5
Other leather products.....	106.3	103.7	+2.5	99.7	+6.6
<b>Textile products</b> .....	<b>89.7</b>	<b>88.3</b>	<b>+1.6</b>	<b>72.5</b>	<b>+23.7</b>
Clothing.....	96.1	95.1	+1.1	85.6	+12.3
Cotton goods.....	104.2	101.5	+2.7	69.2	+50.6
Hosiery and underwear.....	64.4	63.8	+9	61.4	+4.9
Rayon.....	29.8	29.5	+1.0	29.5	+1.0
Silk.....				42.8	
Woolen and worsted goods.....	101.4	98.2	+3.3	84.2	+20.4
Other textile products.....	95.0	96.8	-1.9	71.6	+32.7
<b>Fuel and lighting materials</b> .....	<b>79.2</b>	<b>79.0</b>	<b>+3</b>	<b>71.0</b>	<b>+11.5</b>
Anthracite.....	84.5	83.3	+1.4	79.6	+6.2
Bituminous coal.....	107.2	106.3	+8	96.8	+10.7
Coke.....	122.2	122.2	0	109.6	+11.5
Electricity.....	(1)	(1)		73.5	
Gas.....	(1)	78.3		84.8	
Petroleum and products.....	61.7	61.4	+5	48.9	+26.2
<b>Metals and metal products</b> .....	<b>98.6</b>	<b>98.6</b>	<b>0</b>	<b>95.4</b>	<b>+3.4</b>
Agricultural implements.....	93.4	92.9	+5	92.4	+1.1
Farm machinery.....	94.4	93.9	+5	93.7	+7
Iron and steel.....	96.9	96.9	0	94.9	+2.1
Motor vehicles.....	100.4	100.4	0	96.1	+4.5
Nonferrous metals.....	84.4	84.4	0	80.7	+4.6
Plumbing and heating.....	87.1	86.8	+3	80.5	+8.2
<b>Building materials</b> .....	<b>106.4</b>	<b>105.5</b>	<b>+9</b>	<b>95.6</b>	<b>+11.3</b>
Brick and tile.....	95.7	95.1	+6	90.2	+6.1
Cement.....	92.2	92.1	+1	90.6	+1.8
Lumber.....	129.1	127.5	+1.3	107.1	+20.5
Paint and paint materials.....	94.7	93.3	+1.5	84.1	+12.6
Plumbing and heating.....	87.1	86.8	+3	80.5	+8.2
Structural steel.....	107.3	107.3	0	107.3	0
Other building materials.....	100.2	99.9	+3	93.5	+7.2
<b>Chemicals and allied products</b> .....	<b>87.4</b>	<b>86.0</b>	<b>+1.6</b>	<b>76.8</b>	<b>+13.8</b>
Chemicals.....	88.2	87.5	+8	84.8	+4.0
Drugs and pharmaceuticals.....	104.4	100.1	+4.3	96.0	+8.8
Fertilizer materials.....	76.6	75.3	+1.7	68.1	+12.5
Mixed fertilizers.....	77.1	77.1	0	74.2	+3.9
Oils and fats.....	91.3	87.3	+4.6	39.9	+128.8
<b>Housefurnishing goods</b> .....	<b>97.2</b>	<b>95.4</b>	<b>+1.9</b>	<b>88.5</b>	<b>+9.8</b>
Furnishings.....	102.1	100.7	+1.4	94.8	+7.7
Furniture.....	92.2	89.9	+2.6	81.8	+12.7
<b>Miscellaneous</b> .....	<b>85.1</b>	<b>83.7</b>	<b>+1.7</b>	<b>76.5</b>	<b>+11.2</b>
Automobile tires and tubes.....	60.8	60.8	0	58.8	+3.4
Cattle feed.....	126.2	108.8	+16.0	75.9	+66.3
Paper and pulp.....	101.7	100.7	+1.0	93.2	+9.1
Rubber, crude.....	47.1	47.8	-1.5	39.8	+18.3
Other miscellaneous.....	91.0	89.8	+1.3	82.6	+10.2
<b>Raw materials</b> .....	<b>90.0</b>	<b>87.6</b>	<b>+2.7</b>	<b>70.5</b>	<b>+27.7</b>
<b>Semimanufactured articles</b> .....	<b>90.3</b>	<b>89.5</b>	<b>+9</b>	<b>77.6</b>	<b>+16.4</b>
<b>Manufactured products</b> .....	<b>92.8</b>	<b>91.5</b>	<b>+1.4</b>	<b>81.5</b>	<b>+13.9</b>
<b>All commodities other than farm products</b> .....	<b>91.9</b>	<b>90.7</b>	<b>+1.3</b>	<b>80.4</b>	<b>+14.3</b>
<b>All commodities other than farm products and foods</b> .....	<b>91.6</b>	<b>90.8</b>	<b>+9</b>	<b>82.3</b>	<b>+11.3</b>

<sup>1</sup> Data not yet available.<sup>2</sup> Revised.

## Index Numbers by Commodity Groups, 1926 to September 1941

Index numbers of wholesale prices by commodity groups for selected years from 1926 to 1940, and by months from September 1940 to September 1941, inclusive, are shown in table 2.

TABLE 2.—Index Numbers of Wholesale Prices by Groups of Commodities

[1926=100]

Year and month	Farm products	Foods	Hides and leather products	Textile products	Fuel and lighting	Metals and metal products	Building materials	Chemicals and allied products	House-furnishing goods	Miscellaneous	All commodities
By years:											
1926.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1929.....	104.9	99.9	109.1	90.4	83.0	100.5	95.4	94.0	94.3	82.6	95.3
1932.....	48.2	61.0	72.9	54.9	70.3	80.2	71.4	73.9	75.1	64.4	64.8
1933.....	51.4	60.5	80.9	64.8	66.3	79.8	77.0	72.1	75.8	62.5	65.9
1936.....	80.9	82.1	95.4	71.5	76.2	87.0	86.7	78.7	81.7	70.5	80.8
1937.....	86.4	85.5	104.6	76.3	77.6	95.7	95.2	82.6	89.7	77.8	86.3
1938.....	68.5	73.6	92.8	66.7	76.5	95.7	90.3	77.0	86.8	73.3	78.6
1939.....	65.3	70.4	95.6	69.7	73.1	94.4	90.5	76.0	86.3	74.8	77.1
1940.....	67.7	71.3	100.8	73.8	71.7	95.8	94.8	77.0	88.5	77.3	78.6
By months:											
1940:											
September.....	66.2	71.5	98.3	72.5	71.0	95.4	95.6	76.8	88.5	76.5	78.0
October.....	66.4	71.1	100.4	73.6	71.6	97.3	97.8	76.9	88.6	76.9	78.7
November.....	68.2	72.5	102.3	74.5	71.9	97.6	98.9	77.5	88.6	77.5	79.6
December.....	69.7	73.5	102.3	74.8	71.7	97.6	99.3	77.7	88.9	77.3	80.0
1941:											
January.....	71.6	73.7	102.4	75.2	72.1	97.7	99.6	78.6	89.0	77.1	80.8
February.....	70.3	73.5	101.6	76.4	72.1	97.6	99.3	78.5	89.1	76.9	80.6
March.....	71.6	75.2	102.6	78.4	72.0	97.7	99.5	79.8	89.5	77.6	81.5
April.....	74.4	77.9	103.9	81.0	72.9	97.9	100.1	81.8	90.4	78.6	83.2
May.....	76.4	79.5	106.4	83.0	75.6	98.1	100.4	83.6	91.4	79.6	84.9
June.....	82.1	83.1	107.8	84.5	77.9	98.3	101.0	83.8	93.1	80.6	87.1
July.....	85.8	84.7	109.4	86.2	78.5	98.5	103.1	85.2	94.4	82.0	88.8
August.....	87.4	87.2	110.2	88.3	79.0	98.6	105.5	86.0	95.4	83.7	90.3
September.....	91.0	89.5	111.3	89.7	79.2	98.6	106.4	87.4	97.2	85.1	91.8

<sup>1</sup> Revised.

The price trend for specified years and months since 1926 is shown in table 3 for the following groups of commodities: Raw materials, semimanufactured articles, manufactured products, commodities other than farm products, and commodities other than farm products and foods. The list of commodities included under the classifications "Raw materials," "Semimanufactured articles," and "Manufactured products" was given in Serial No. R. 1251—Wholesale Prices, December and year 1940.



TABLE 3.—Index Numbers of Wholesale Prices by Special Groups of Commodities

[1926=100]

Year and month	Raw materials	Semi-manufactured articles	Manufactured products	All commodities other than farm products	All commodities other than farm products and foods	Year and month	Raw materials	Semi-manufactured articles	Manufactured products	All commodities other than farm products	All commodities other than farm products and foods
By years:						By months—Con.					
1926.....	100.0	100.0	100.0	100.0	100.0	1940—Con.					
1929.....	97.5	93.9	94.5	93.3	91.6	November.....	72.6	80.7	82.6	81.9	84.1
1932.....	55.1	59.3	70.3	68.3	70.2	December.....	73.6	80.7	82.8	82.1	84.1
1933.....	56.5	65.4	70.5	69.0	71.2	1941:					
1936.....	79.9	75.9	82.0	80.7	79.6	January.....	74.6	81.3	83.5	82.7	84.3
1937.....	84.8	85.3	87.2	86.2	85.3	February.....	74.0	81.6	83.5	82.7	84.4
1938.....	72.0	75.4	82.2	80.6	81.7	March.....	75.3	83.4	84.2	83.6	84.9
1939.....	70.2	77.0	80.4	79.5	81.3	April.....	77.5	85.1	85.5	85.0	85.9
1940.....	71.9	79.1	81.6	80.8	83.0	May.....	79.7	86.4	87.1	86.6	87.4
By months:						June.....	83.6	87.6	88.6	88.0	88.6
1940:						July.....	86.1	87.9	90.1	89.3	89.7
September.....	70.5	77.6	81.5	80.4	82.3	August.....	87.6	89.5	91.5	90.7	90.8
October.....	71.4	79.4	82.1	81.3	83.5	September.....	90.0	90.3	92.8	91.9	91.6

## Weekly Fluctuations

Weekly fluctuations in the major commodity group classifications during August and September are shown by the index numbers in table 4.

TABLE 4.—Weekly Index Numbers of Wholesale Prices by Commodity Groups, August and September 1941

[1926=100]

Commodity group	Sept. 27	Sept. 20	Sept. 13	Sept. 6	Aug. 30	Aug. 23	Aug. 16	Aug. 9	Aug. 2
All commodities.....	91.2	91.5	91.6	91.0	90.6	90.0	89.6	89.6	89.2
Farm products.....	89.9	91.2	91.6	89.1	88.6	86.7	86.4	87.8	87.2
Foods.....	87.6	88.5	89.1	88.6	88.2	87.0	86.7	86.2	85.5
Hides and leather products.....	112.3	111.7	111.4	111.2	110.9	110.8	110.2	109.9	109.7
Textile products.....	89.6	89.2	88.7	88.3	87.6	87.3	87.4	87.1	86.6
Fuel and lighting materials.....	80.1	80.0	80.0	79.9	79.8	79.8	79.5	79.6	79.4
Metals and metal products.....	98.7	98.7	98.7	98.7	98.7	98.6	98.7	98.6	98.6
Building materials.....	106.6	106.2	105.9	106.0	105.7	105.2	104.8	104.2	103.3
Chemicals and allied products.....	88.1	87.8	87.3	86.0	85.8	85.9	85.9	85.7	85.5
Housefurnishing goods.....	98.3	98.0	97.9	97.1	96.9	96.8	96.4	95.9	95.8
Miscellaneous.....	85.1	85.0	84.9	84.5	84.1	83.6	83.1	83.0	82.3
Raw materials.....	89.0	89.8	90.0	88.5	88.1	86.9	86.7	87.4	87.0
Semimanufactured articles.....	90.3	90.1	89.9	90.0	89.7	89.4	89.5	88.9	88.5
Manufactured products.....	92.7	92.8	93.0	92.6	92.2	91.8	91.3	91.0	90.7
All commodities other than farm products.....	91.5	91.6	91.7	91.4	91.0	90.7	90.3	90.0	89.7
All commodities other than farm products and foods.....	92.0	91.8	91.6	91.4	91.1	90.9	90.7	90.6	90.2

# Trend of Employment and Unemployment

## SUMMARY OF REPORTS OF EMPLOYMENT FOR SEPTEMBER 1941

### *Total Nonagricultural Employment*

DEFENSE production continued to expand, with all manufacturing industries combined showing an employment rise of 179,000 workers from mid-August to mid-September. This increase was of slightly smaller than seasonal proportions because of the tapering off of expansion in some of the heavy metals and machinery industries and reduced operations in other industries caused by material shortages.

Total civil nonagricultural employment in September stood at 40,044,000, an increase of 400,000 over August, of 3,516,000 from September 1940, and of 2,574,000 since the September 1929 peak. These figures do not include CCC enrollees, workers on WPA or NYA projects, or the armed forces.

All major branches of civil nonagricultural employment showed substantial gains over the past year, the largest being in manufacturing (1,886,000). The gains in other groups were 446,000 in construction, 376,000 in Federal, State, and local government services, 338,000 in trade, and 245,000 in the transportation and public utilities group.

The armed forces of the Nation aggregated 1,992,000 in September 1941, a rise of 48,000 over the preceding month.

Emergency relief employment showed the following decreases: 5,000 on work-relief projects of the Work Projects Administration, 6,000 on the out-of-school work program of the National Youth Administration, and 27,000 in the Civilian Conservation Corps.

### *Industrial and Business Employment*

The defense program has caused a marked alteration in the industrial distribution of the manufacturing force as evidenced by the fact that there are now more workers employed in the durable- than in the nondurable-goods industries. A year ago the number employed in nondurable-goods manufacturing was considerably higher than that for durable goods, and even in the peak months of 1929 the nondurable-goods employment total exceeded that of the durable-goods group. From September 1940 to September 1941, employment in the durable-goods group rose 31.4 percent to a total of 5,478,000

workers, while in nondurable goods it advanced only 12.5 percent to 5,201,000.

Employment in 18 selected strategic industries handling a greater part of defense orders continued the steady increase which began in June 1940, the beginning of the defense program. The aggregate gain in these industries since that time was 1,046,000 wage earners (65 percent), while for all manufacturing industries combined the increase was 2,541,000 (31 percent). The sharp rise in shipbuilding employment from August to September reflected in part the resumption of operations at one major shipyard which had closed down in August because of labor difficulties. Employment in the aircraft industry continued expanding at a high rate, but the gain in machine-tool plants was of smaller proportions, indicating a tapering off of expansion under existing plant facilities. The automobile industry showed a smaller employment gain (12.9 percent) between August and September of this year than in the same period last year (31.2 percent), but there was a gain of 10.0 percent over the year interval. The canning industry reported a smaller-than-seasonal increase of 5.7 percent between August and September and a gain of 19.6 percent since September of last year.

For all manufacturing industries combined the employment and pay-roll indexes stood at the highest levels on record, 135.3 and 163.0 percent, respectively, of the 1923-25 averages. Expansion in working hours, overtime and shift premiums, and wage-rate increases accounted in large measure for the greater increase in pay rolls than in employment.

Among the nonmanufacturing industries employment increased slightly over the month interval in bituminous-coal mining, but remained at the August level in anthracite mining. Pay rolls, however, declined slightly because of the Labor Day holiday and labor difficulties. Employment and pay rolls increased contraseasonally in quarrying and nonmetallic mining and less than seasonally in retail trade. In the latter industry, however, both employment and pay rolls were at significantly higher levels than a year ago. In private building construction employment decreased contraseasonally by 1.6

percent between August and September, but was 10.3 percent above the level of a year ago.

A preliminary report of the Interstate Commerce Commission for class I steam railroads showed an employment gain of 0.3 percent between August and September, the total number employed in September being 1,211,258. Corresponding pay-roll figures for September were not available when this report was prepared. For August they were \$199,953,175, an increase of \$2,786,900 since July.

*Hours and earnings.*—The average hours worked per week by manufacturing wage earners were 40.9 in September, a decrease of 0.1 percent since August. The corresponding average hourly earnings were 75.8 cents, a gain of 1.6 percent over the preceding month. The average weekly earnings of factory wage earners (both full- and part-time combined) were \$32.01, an increase of 1.3 percent since July. Of the 16 nonmanufacturing industries regularly surveyed 9 reported increases in average weekly earnings. Of the 14 nonmanufacturing industries for which man-hours are available, 6 showed gains in average hours worked per week and 11 reported increases in average hourly earnings. Wage-rate increases averaging 9 percent and affecting 428,593 wage earners were reported by about 1,300 manufacturing plants out of a reporting sample of approximately 34,000 plants employing more than 7,800,000 wage earners. Wage-rate increases reported for nonmanufacturing industries affected about 42,000 workers, of whom about 22,000 were employed by public utilities. As the Bureau's survey does not cover all establishments in an industry and furthermore, as some firms may have failed to report wage changes, these figures should not be construed as representing the total number of wage changes occurring in manufacturing and non-manufacturing industries.

Employment and pay-roll indexes and average weekly earnings for September 1941 are given in table 1 for all manufacturing industries combined, for selected nonmanufacturing industries, for water transportation, and for class I railroads. Percentage changes over the month and year intervals are also given.



TABLE 1.—*Employment, Pay Rolls, and Earnings in All Manufacturing Industries Combined and in Nonmanufacturing Industries, September 1941 (Preliminary Figures)*

Industry	Employment			Pay rolls			Average weekly earnings		
	Index, September 1941	Percentage change from—		Index, September 1941	Percentage change from—		Average in September 1941	Percentage change from	
		August 1941	September 1940		August 1941	September 1940		August 1941	September 1940
All manufacturing industries combined <sup>1</sup> .....	(1923-25 = 100) 135.3	+1.7	+21.5	(1923-25 = 100) 163.0	+3.0	+46.1	\$32.01	+1.3	+20.3
Class I steam railroads <sup>2</sup> .....	(1935-39 = 100) 118.7	+0.3	+13.5	(1935-39 = 100) ( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
Coal mining:	(1929 = 100)			(1929 = 100)					
Anthracite <sup>4</sup> .....	50.0	—( <sup>5</sup> )	+4	49.6	—2.8	+26.1	32.60	—2.9	+25.6
Bituminous <sup>4</sup> .....	94.2	+1.8	+7.5	115.6	—1.5	+39.0	32.76	—3.2	+29.3
Metalliferous mining <sup>6</sup> .....	78.8	—1.4	+8.6	85.9	+6	+23.7	34.37	+2.1	+13.8
Quarrying and nonmetallic mining.....	54.4	+9	+11.2	60.6	+2.1	+31.0	28.25	+1.2	+17.8
Crude-petroleum production.....	61.6	—1.0	—2.2	63.3	+2.9	+8.8	37.67	+3.9	+11.2
Public utilities:									
Telephone and telegraph <sup>7</sup> .....	90.2	+6	+14.2	118.8	+2.0	+16.7	* 32.20	+1.4	+2.1
Electric light and power <sup>7</sup> .....	94.6	—7	+2.0	114.2	—8	+7.9	* 36.72	—1	+5.9
Street railways and busses <sup>7</sup> .....	69.9	+2	+1.9	78.1	—7	+9.2	* 36.37	—8	+7.2
Trade:									
Wholesale <sup>10</sup> .....	95.4	—4	+4.9	90.6	+9	+11.7	* 33.04	+1.3	+6.4
Retail <sup>7</sup> .....	99.9	+3.1	+7.7	95.8	+1.9	+12.6	* 22.09	—1.1	+4.6
Hotels (year-round) <sup>4</sup> <sup>11</sup> .....	95.3	+9	+4.1	89.1	+1.0	+8.9	* 16.14	+1	+4.6
Laundries <sup>4</sup> .....	113.1	—1.3	+11.0	105.2	+5	+17.0	19.29	+1.9	+5.4
Dyeing and cleaning <sup>4</sup> .....	121.0	+1.8	+10.0	99.4	+8.0	+16.1	22.74	+6.1	+5.5
Brokerage.....	( <sup>3</sup> )	—1.3	—9.1	( <sup>3</sup> )	—1.5	—2.4	* 39.36	—3	+7.3
Insurance.....	( <sup>3</sup> )	—4	+1.4	( <sup>3</sup> )	—1.3	+4.5	* 37.01	—8	+3.0
Building construction.....	( <sup>3</sup> )	—1.6	+10.3	( <sup>3</sup> )	+1.3	+23.8	37.10	+3.0	+12.3
Water transportation <sup>12</sup> .....	78.5	—1.0	—1.4	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )

<sup>1</sup> Indexes adjusted to preliminary 1939 Census of Manufactures. See table 9 in December 1940 Employment and Pay Rolls for comparable series back to January 1919.

<sup>2</sup> Preliminary; source—Interstate Commerce Commission.

<sup>3</sup> Not available.

<sup>4</sup> Indexes adjusted to 1935 census. Comparable series back to January 1929 presented in January 1938 issue of the pamphlet, Employment and Pay Rolls. See also table 7 of October 1940 pamphlet for revised figures for anthracite mining, February to September 1940, inclusive.

<sup>5</sup> Less than one-tenth of 1 percent.

<sup>6</sup> See table 7 of February 1941 pamphlet for revised figures January 1938 to January 1941.

<sup>7</sup> Retail-trade indexes adjusted to 1935 census and public utility indexes to 1937 census. Not comparable with indexes published in pamphlets prior to January 1940 or in the Monthly Labor Review prior to April 1940. Revised series available upon request.

<sup>8</sup> Average weekly earnings not strictly comparable with figures published in issues of the pamphlet dated earlier than January 1938, or in the Monthly Labor Review dated earlier than April 1938 (except for the January figures appearing in the March issue), as they now exclude corporation officers, executives and other employees whose duties are mainly supervisory.

<sup>9</sup> Covers street railways and trolley and motorbus operations of subsidiary, affiliated, and successor companies.

<sup>10</sup> Indexes adjusted to 1933 census. Comparable series in November 1934 and subsequent issues of pamphlet, or February 1935 and subsequent issues of Monthly Labor Review.

<sup>11</sup> Cash payments only; the additional value of board, room, and tips cannot be computed.

<sup>12</sup> Based on estimates prepared by the United States Maritime Commission.

*Public Employment*<sup>1</sup>

The hiring of approximately 79,000 additional workers during the month ending September 15 brought employment on construction projects financed from appropriations to regular Federal agencies up to 962,000. Rapidly increasing activity on the construction of naval vessels, airports, and nonresidential buildings was largely responsible for the employment gain. Of the 962,000 men employed on all types of projects, 730,000 were working on defense projects and 232,000 on nondefense projects. Pay-roll disbursements of \$140,596,000 were \$11,557,000 more than in the month ending August 15.

United States Housing Authority low-rent housing projects furnished employment to about 1,000 additional workers in the month ending September 15. Twenty-seven percent of the 45,000 building-trades workers employed on housing projects were working on defense housing. Total pay rolls of \$5,126,000 were \$92,000 more than in the preceding month.

Employment on construction projects financed by the Public Works Administration dropped to 4,600 in the month ending September 15. Pay-roll disbursements amounted to \$440,000.

Greater activity on the construction of industrial plants intended for the manufacture of defense goods increased employment on construction projects financed by the Reconstruction Finance Corporation by 1,800 in the month ending September 15. Almost 90 percent of the 14,500 men employed on projects financed by the Reconstruction Finance Corporation were working on defense construction. Wage payments of \$2,663,000 on all projects were \$316,000 more than in the month ending August 15.

Work-relief employment on projects operated by the Work Projects Administration declined 5,000 in September. Of the 1,037,000 persons remaining on work-relief projects, 335,000 were employed on defense projects and 702,000 were working on nondefense projects. Pay-roll disbursements of \$61,300,000 were \$800,000 less than in August.

In the regular services of the Federal Government increased employment was reported in the executive, legislative, and military branches and a decrease in the judicial branch.

A summary of employment and pay-roll data in the regular Federal services and on projects financed wholly or partially from Federal funds is given in table 2.

<sup>1</sup> The figures on public employment given below are all preliminary. Reports received while this was in press indicate that there may be considerable changes in the figures cited, although the general trend will not be affected. The corrected figures will appear in the next issue of the Monthly Labor Review, or will be supplied upon request to the Bureau.

TABLE 2.—Summary of Employment and Pay Rolls in Regular Federal Services and on Projects Financed Wholly or Partially from Federal Funds, September 1941 (Preliminary Figures)<sup>a</sup>

Class	Employment			Pay rolls		
	September 1941	August 1941	Percentage change	September 1941	August 1941	Percentage change
Federal services:						
Executive <sup>1</sup> .....	1,469,000	1,444,985	+1.7	\$222,260,000	\$217,772,054	+2.1
Judicial.....	2,571	2,578	— .3	661,970	641,349	+3.2
Legislative.....	6,180	6,048	+2.2	1,345,008	1,334,808	+ .8
Military.....	1,992,022	1,944,094	+2.5	133,030,642	129,582,075	+2.7
Construction projects:						
Financed by regular Federal appropriations.....	962,262	883,408	+8.9	140,595,891	129,039,031	+9.0
Defense.....	730,102	652,643	+11.9	115,030,814	104,638,898	+9.9
Other.....	232,160	230,765	+ .6	25,565,077	24,400,133	+4.8
USHA low-rent housing.....	45,000	44,191	+1.8	5,126,400	5,034,069	+1.8
Defense.....	11,955	12,023	— .6	1,414,000	1,422,272	— .6
Other.....	33,045	32,168	+2.7	3,712,400	3,611,797	+2.8
Financed by PWA <sup>2</sup> .....	4,561	5,909	—22.8	439,910	672,435	—34.6
Financed by RFC <sup>3</sup> .....	16,500	14,670	+12.5	2,632,639	2,347,076	+13.4
Defense.....	14,173	11,644	+21.7	2,355,073	1,969,029	+19.6
Other.....	2,327	3,026	—23.1	307,566	378,047	—18.6
Work projects:						
Administration projects.....	1,036,981	1,042,565	— .5	61,300,000	62,100,000	—1.3
Defense.....	335,296	349,719	—4.1	19,800,000	20,800,000	—4.8
Other.....	701,685	692,846	+1.3	41,500,000	41,300,000	+ .5
National Youth Administration:						
Student-work program.....	42,900	338	—	182,032	1,350	—
Out-of-school work program.....	312,074	318,388	—2.0	7,452,277	7,564,639	—1.5
Civilian Conservation Corps.....	190,110	203,271	—6.5	9,258,055	9,988,793	—7.3

<sup>a</sup> See footnote on p. 1325.<sup>1</sup> Includes force-account and supervisory and technical employees shown under other classifications to the extent of 205,386 employees and pay-roll disbursements of \$31,402,701 for September 1941, and 202,075 employees and pay-roll disbursements of \$29,816,240 for August 1941.<sup>2</sup> Data covering PWA projects financed from National Industrial Recovery Act funds, Emergency Relief Appropriation Acts of 1935, 1936, 1937 funds, and Public Works Administration Appropriation Act of 1938 funds are included. These data are not shown under projects financed by the Work Projects Administration. Includes 2,476 wage earners and \$202,031 pay roll for September 1941; 3,125 wage earners and \$333,772 pay roll for August 1941, covering Public Works Administration projects financed from Emergency Relief Appropriation Acts of 1935, 1936, and 1937 funds. Includes 1,981 wage earners and \$228,054 pay roll for September 1941 financed from funds provided by the Public Works Administration Appropriation Act of 1938.<sup>3</sup> Includes 677 employees and pay-roll disbursements of \$96,391 for September 1941; 595 employees and pay roll disbursements of \$95,544 for August 1941 on projects financed by the RFC Mortgage Co.

## DETAILED REPORTS FOR INDUSTRIAL AND BUSINESS EMPLOYMENT, AUGUST 1941

A MONTHLY report on employment and pay rolls is published as a separate pamphlet by the Bureau of Labor Statistics. This gives detailed data regarding employment, pay rolls, working hours, and earnings for the current month for industrial and business establishments and for the various forms of public employment. This pamphlet is distributed free upon request. Its principal contents for August 1941, insofar as industrial and business employment is concerned, are reproduced in this section of the Monthly Labor Review.

*Estimates of Nonagricultural Employment*

The estimates of "Total civil nonagricultural employment," given on the first line of table 1 represent the total number of persons engaged in gainful work in the United States in nonagricultural industries, excluding military and naval personnel, persons employed on WPA or NYA projects, and enrollees in CCC camps. The series described as "Employees in nonagricultural establishments" also excludes proprietors and firm members, self-employed persons, casual workers, and persons in domestic service. The estimates for "Employees in nonagricultural establishments" are shown separately for each of seven major industry groups. Tables giving figures for each group, by months, for the period from January 1929 to date are available on request.

The figures represent the number of persons working at any time during the week ending nearest the middle of each month. The totals for the United States have been adjusted to conform to the figures shown by the 1930 Census of Occupations for the number of nonagricultural "gainful workers" less the number shown to have been unemployed for 1 week or more at the time of the census. Separate estimates for "Employees in nonagricultural establishments" are shown in table 2 for each of the 48 States and the District of Columbia for July and August 1941 and August 1940. Tables showing monthly figures for each State from January 1938 to date are available on request. Because the State figures do not include employees on merchant vessels, and because of certain adjustments in the United States estimates which have not been made on a State basis, the total of the State estimates will not agree exactly with the figures for the United States as a whole.

These estimates are based in large part on industrial censuses and on regular reports of employers to the United States Bureau of Labor Statistics and to other Government agencies, such as the Interstate Commerce Commission. Data derived from employers' quarterly reports in connection with "old-age and survivors' insurance," and employers' monthly reports in connection with unemployment compensation have been used extensively as a check on estimates derived from other sources, and in some industries they have provided the most reliable information available.



TABLE 1.—*Estimates of Total Nonagricultural Employment, by Major Groups*

[In thousands]

Industry	August 1941 (preliminary)	July 1941	Change July to August 1941	August 1940	Change August 1940 to August 1941
Total civil nonagricultural employment <sup>1</sup>	39,564	39,281	+283	35,902	+3,662
Employees in nonagricultural establishments: <sup>2</sup>					
Manufacturing <sup>3</sup>	33,421	33,138	+283	29,759	+3,662
Mining	12,168	11,995	+173	10,163	+2,035
Construction	904	888	+16	839	+65
Transportation and public utilities	1,921	1,895	+26	1,443	+478
Trade	3,323	3,290	+33	3,081	+242
Finance, service, and miscellaneous	6,543	6,512	+31	6,168	+375
Federal, State, and local Government:	4,394	4,394	0	4,226	+168
Civil employees	4,168	4,164	+4	3,839	+329
Military and naval forces <sup>4</sup>	1,944	1,857	+87	549	+1,366

<sup>1</sup> Excludes military and naval forces as well as employees on WPA and NYA projects, and enrollees in CCC camps. Includes proprietors, firm members, self-employed persons, casual workers, and domestic servants. Includes allowance for adjustment of factory wage-earner totals to preliminary 1939 Census of Manufactures. Revised series available on request.

<sup>2</sup> Excludes all of the groups omitted from "Total civil nonagricultural employment" as well as proprietors, firm members, self-employed persons, casual workers, and domestic servants.

<sup>3</sup> Adjusted to preliminary 1939 Census of Manufactures.

<sup>4</sup> Not included in total shown above. Includes members of the National Guard inducted into the Federal service by act of Congress.

TABLE 2.—*Estimated Number of Employees in Nonagricultural Establishments, by States*

[Excludes proprietors, firm members, self-employed persons, casual workers, domestic workers, the armed forces of the United States, and employees on merchant vessels]

[Numbers in thousands]

Geographic division and State	August 1941 (preliminary)	July 1941	Change July to August 1941		August 1940	Change August 1940 to August 1941	
			Number	Percentage		Number	Percentage
<b>New England</b>	<b>2,961</b>	<b>2,944</b>	<b>+17</b>	<b>+0.6</b>	<b>2,536</b>	<b>+425</b>	<b>+16.7</b>
Maine	223	217	+6	+2.8	198	+25	+12.5
New Hampshire	153	152	+1	+0.5	135	+18	+13.0
Vermont	80	80	0	+0.2	74	+6	+8.0
Massachusetts	1,530	1,527	+3	+0.2	1,321	+209	+15.8
Rhode Island	276	272	+4	+1.4	228	+48	+20.8
Connecticut	699	696	+3	+0.5	580	+119	+20.5
<b>Middle Atlantic</b>	<b>8,484</b>	<b>8,439</b>	<b>+55</b>	<b>+0.6</b>	<b>7,710</b>	<b>+774</b>	<b>+10.0</b>
New York	4,189	4,140	+49	+1.2	3,881	+308	+8.0
New Jersey	1,302	1,314	-12	-0.9	1,166	+136	+11.6
Pennsylvania	2,993	2,975	+18	+0.6	2,663	+330	+12.4
<b>East North Central</b>	<b>7,774</b>	<b>7,792</b>	<b>-18</b>	<b>-0.2</b>	<b>6,780</b>	<b>+994</b>	<b>+14.7</b>
Ohio	2,057	2,041	+16	+0.8	1,775	+282	+15.9
Indiana	944	929	+15	+1.5	786	+158	+20.1
Illinois	2,500	2,527	+33	+1.3	2,255	+305	+13.5
Michigan	1,487	1,564	-77	-4.9	1,319	+168	+12.8
Wisconsin	726	731	-5	-0.7	645	+81	+12.6
<b>West North Central</b>	<b>2,592</b>	<b>2,559</b>	<b>+33</b>	<b>+1.3</b>	<b>2,360</b>	<b>+232</b>	<b>+9.8</b>
Minnesota	587	578	+9	+1.5	536	+51	+9.4
Iowa	440	430	+10	+2.3	409	+31	+7.5
Missouri	857	849	+8	+1.0	759	+98	+12.9
North Dakota	79	79	0	+0.1	78	+1	+2.5
South Dakota	85	85	0	-0.4	85	0	+0.1
Nebraska	217	213	+4	+1.6	200	+17	+8.3
Kansas	327	325	+2	+0.7	293	+34	+11.6

TABLE 2.—Estimated Number of Employees in Nonagricultural Establishments, by States—Continued

[Excludes proprietors, firm members, self-employed persons, casual workers, domestic workers, the armed forces of the United States, and employees on merchant vessels]

[Numbers in thousands]

Geographic division and State	August 1941 (preliminary)	July 1941	Change July to August 1941		August 1940	Change August 1940 to August 1941	
			Number	Percentage		Number	Percentage
<b>South Atlantic</b> .....	<b>4,019</b>	<b>3,938</b>	<b>+81</b>	<b>+2.0</b>	<b>3,494</b>	<b>+535</b>	<b>+15.3</b>
Delaware.....	81	79	+2	+2.3	77	+4	+4.6
Maryland.....	626	610	+16	+2.6	518	+108	+20.8
District of Columbia.....	410	409	+1	+0.2	350	+60	+17.3
Virginia.....	603	597	+6	+0.9	491	+112	+22.8
West Virginia.....	411	405	+6	+1.3	371	+40	+10.7
North Carolina.....	661	625	+36	+5.8	595	+66	+11.1
South Carolina.....	325	320	+5	+1.6	277	+48	+17.2
Georgia.....	543	532	+11	+2.1	467	+76	+16.3
Florida.....	359	361	-2	-0.7	338	+21	+6.2
<b>East South Central</b> .....	<b>1,519</b>	<b>1,502</b>	<b>+17</b>	<b>+1.1</b>	<b>1,338</b>	<b>+183</b>	<b>+13.7</b>
Kentucky.....	389	389	0	+0.1	358	+31	+8.5
Tennessee.....	497	490	+7	+1.3	436	+61	+13.9
Alabama.....	432	424	+8	+2.0	365	+67	+18.5
Mississippi.....	201	199	+2	+1.1	177	+24	+13.7
<b>West South Central</b> .....	<b>2,028</b>	<b>1,983</b>	<b>+35</b>	<b>+1.7</b>	<b>1,813</b>	<b>+215</b>	<b>+11.8</b>
Arkansas.....	203	193	+10	+5.1	179	+24	+13.7
Louisiana.....	400	393	+7	+1.7	360	+40	+11.0
Oklahoma.....	307	306	+1	+0.1	286	+21	+7.1
Texas.....	1,118	1,101	+17	+1.6	988	+130	+13.1
<b>Mountain</b> .....	<b>863</b>	<b>853</b>	<b>+10</b>	<b>+1.3</b>	<b>793</b>	<b>+70</b>	<b>+8.9</b>
Montana.....	122	120	+2	+1.8	116	+6	+4.7
Idaho.....	94	91	+3	+4.0	88	+6	+6.9
Wyoming.....	59	59	0	+0.6	55	+4	+9.0
Colorado.....	248	244	+4	+1.5	227	+21	+9.5
New Mexico.....	81	80	+1	+0.7	71	+10	+13.0
Arizona.....	96	95	+1	+1.1	86	+10	+11.4
Utah.....	125	126	-1	-0.8	116	+9	+8.1
Nevada.....	38	38	0	+1.1	34	+4	+12.6
<b>Pacific</b> .....	<b>2,837</b>	<b>2,766</b>	<b>+71</b>	<b>+2.5</b>	<b>2,488</b>	<b>+349</b>	<b>+14.0</b>
Washington.....	499	490	+9	+1.8	434	+65	+14.9
Oregon.....	284	276	+8	+2.9	250	+34	+13.9
California.....	2,054	2,000	+54	+2.7	1,804	+250	+13.9

*Industrial and Business Employment*

Monthly reports on employment and pay rolls are available for 157 manufacturing industries; 16 nonmanufacturing industries, including private building construction; water transportation; and class I steam railroads. The reports for the first 2 of these groups—manufacturing and nonmanufacturing—are based on sample surveys by the Bureau of Labor Statistics. The figures on water transportation are based on estimates prepared by the Maritime Commission and those on class I steam railroads are compiled by the Interstate Commerce Commission. They are presented in the foregoing summary.

The indexes of factory employment and pay rolls relate to wage earners only. Those shown in table 3 are based on the 3-year average 1923-25 as 100. For all manufacturing industries combined, the durable-goods group, the nondurable-goods group, and aluminum

manufactures, they have been adjusted to preliminary 1939 census figures and for automobiles to the 1933 census. The indexes for all other groups and industries have been adjusted to 1937 census data except for the aircraft industry and the transportation equipment group, which have been adjusted on the basis of a complete employment survey of the aircraft industry made by the Bureau of Labor Statistics in August 1940. The over-all manufacturing indexes are computed from reports supplied by representative manufacturing establishments in 90 of the 157 industries surveyed. These reports cover more than 55 percent of the total wage earners in all manufacturing industries of the country and more than 65 percent of the wage earners in the 90 industries covered.

The indexes for the nonmanufacturing industries are based on the 12-month average for 1929 as 100. Figures for mining, laundries and dyeing and cleaning cover wage earners only, but the figures for public utilities, trade, and hotels relate to all employees except corporation officers, executives, and other employees whose duties are mainly supervisory. For crude-petroleum production they cover wage earners and clerical field force. The coverage of the reporting samples for the various nonmanufacturing industries ranges from approximately 25 percent for wholesale and retail trade, dyeing and cleaning, and insurance, to approximately 80 percent for quarrying and nonmetallic mining, anthracite mining, and public utilities.

The indexes for retail trade have been adjusted to conform in general with the 1935 Census of Retail Distribution and are weighted by lines of trade. For the public utilities they have been adjusted to the 1937 Census of Electrical Industries, for wholesale trade to the 1933 census, and for coal mining, year-round hotels, laundries, and dyeing and cleaning to the 1935 censuses.

Data for both manufacturing and nonmanufacturing industries are based on reports of the number of employees and the amount of pay rolls for the pay period ending nearest the 15th of the month.

The average weekly earnings shown in table 3 are computed by dividing the weekly pay rolls in the reporting establishments by the total number of full- and part-time employees reported. As not all reporting establishments supply man-hours, average hours worked per week and average hourly earnings are necessarily based on data furnished by a slightly smaller number of reporting firms. The size and composition of the reporting sample vary somewhat from month to month and, therefore, the average hours per week, average hourly earnings, and average weekly earnings shown may not be strictly comparable from month to month. The sample, however, is believed to be sufficiently adequate in virtually all instances to indicate the general movement of earnings and hours over the period shown. The changes from the preceding month, expressed as percentages, are

based on identical lists of firms for the 2 months, but the changes from August 1940 are computed from chain indexes based on the month-to-month percentage changes.

**EMPLOYMENT AND PAY-ROLL INDEXES, AVERAGE HOURS, AND  
AVERAGE EARNINGS**

The indexes of employment and pay rolls as well as average hours worked per week, average hourly earnings, and average weekly earnings in manufacturing and nonmanufacturing industries for June, July, and August 1941, where available, are presented in table 3. The June and July figures, where given, may differ in some instances from those previously published because of revisions necessitated primarily by the inclusion of late reports. Indexes of employment and pay rolls are given in table 4 for 55 additional manufacturing industries for the months of June, July, and August, 1941. These indexes are based on 1939 as 100 and are available in mimeographed form for the period from January 1939 to January 1941, inclusive.

In table 5 indexes of employment and pay rolls are given for all manufacturing industries combined, for the durable- and nondurable-goods groups of manufacturing industries, and for each of 13 non-manufacturing industries, by months, from August 1940 to August 1941. The indexes for all manufacturing industries combined, the durable-goods group, and the nondurable-goods group have been adjusted to preliminary 1939 census figures. Comparable indexes for all available months and years back to January 1919 are given in tables 9, 10, and 11 of the December 1940 issue of the pamphlet "Employment and Pay Rolls." The chart on page 1338 indicates the trend of factory employment and pay rolls from January 1919 to August 1941.

Indexes of factory employment by metropolitan areas and cities of 100,000 population or over according to the 1930 Census of Population are given in table 6 for July and August 1941 and August 1940, together with percentage changes from July to August 1941 and from August 1940 to August 1941.



TABLE 3.—*Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries*

MANUFACTURING

[Indexes are based on 3-year average, 1923-25=100. For "all manufacturing," "durable goods," "nondurable goods," and "aluminum manufactures" they have been adjusted to preliminary 1939 census figures. The indexes for all other manufacturing groups and industries have been adjusted to 1937 census figures, except as otherwise noted, and are not comparable to indexes published in pamphlets prior to August 1939. Comparable series available upon request.]

Industry	Employment index			Pay-roll index			Average weekly earnings <sup>1</sup>			Average hours worked per week <sup>1</sup>			Average hourly earnings <sup>1</sup>		
	Aug. 1941	July 1941	June 1941	Aug. 1941	July 1941	June 1941	Aug. 1941	July 1941	June 1941	Aug. 1941	July 1941	June 1941	Aug. 1941	July 1941	June 1941
<b>All manufacturing<sup>2</sup></b>	132.8	130.5	127.9	157.8	152.6	152.2	831.65	831.24	831.88	41.0	40.3	41.3	74.5	74.4	73.8
Durable goods <sup>3</sup>	138.4	137.7	135.1	177.1	172.3	173.9	36.54	35.83	36.91	42.6	41.5	43.1	83.0	82.6	82.2
Nondurable goods <sup>3</sup>	127.5	123.7	121.1	136.2	130.7	127.9	25.37	25.12	25.11	39.4	39.0	39.4	65.8	65.7	65.0
<b>Durable goods</b>															
<b>Iron and steel and their products, not including machinery</b>	139.9	137.7	136.1	172.1	166.3	163.6	36.14	35.49	36.40	41.4	39.9	42.0	87.1	86.2	86.3
Blast furnaces, steel works, and rolling mills	140.1	147.2	144.0	183.3	181.6	179.9	38.81	38.90	39.46	40.1	38.7	40.9	96.8	96.5	96.4
Bolts, nuts, washers, and rivets	171.0	167.4	165.6	240.8	224.3	248.4	33.76	32.14	36.02	45.0	41.6	45.8	80.2	77.2	78.7
Cast-iron pipe	96.1	97.6	96.9	111.8	112.2	114.6	27.91	27.45	28.25	41.1	40.4	41.9	67.5	67.7	67.0
Cutlery (not including silver and plated cutlery) and edge tools	127.4	123.6	120.4	147.5	134.9	139.2	30.38	28.65	30.32	44.0	42.0	43.9	70.2	69.1	69.9
Forgings, iron and steel	110.8	108.2	105.3	169.3	158.4	164.6	41.41	39.68	42.45	45.9	44.4	47.4	90.5	89.6	89.7
Hardware	113.2	103.8	118.3	153.6	124.1	150.2	33.11	29.26	31.26	42.8	41.1	42.5	77.5	71.2	73.7
Plumbers' supplies <sup>4</sup>	102.6	101.7	102.4	107.1	101.6	106.3	30.21	28.80	29.90	40.1	38.9	40.4	75.3	74.2	74.0
Stamped and enameled ware	225.1	222.0	220.2	288.5	272.1	279.0	29.77	28.61	29.67	41.6	39.9	41.7	72.0	71.6	71.2
Steam and hot-water heating apparatus and steam fittings	125.2	119.0	114.1	147.7	137.5	137.8	35.51	34.65	36.32	44.0	43.4	44.8	81.1	80.1	81.2
Stoves	117.2	116.6	115.9	127.6	122.1	124.7	30.70	29.52	30.33	41.5	40.3	41.5	74.0	73.1	73.1
Structural and ornamental metalwork	109.5	107.3	105.5	123.8	112.1	120.1	36.84	33.74	36.98	44.3	41.2	44.4	82.9	82.2	83.6
Tin cans and other tinware	145.3	138.8	132.0	184.7	171.3	163.2	28.42	27.69	27.70	42.9	42.0	42.1	66.9	66.4	66.0
Tools (not including edge tools, machine tools, files, and saws) <sup>5</sup>	142.6	140.3	138.7	183.3	174.3	182.3	32.82	31.70	33.45	46.5	43.4	46.8	70.8	73.1	71.6
Wirework	103.7	213.2	216.1	252.3	271.6	284.5	31.75	30.85	31.88	41.5	42.0	42.9	70.0	73.5	74.3
<b>Machinery, not including transportation equipment.</b>	175.5	172.3	167.7	241.3	232.9	239.9	38.16	37.51	38.00	45.1	44.6	45.6	84.4	83.6	83.2
Agricultural implements (including tractors)	172.0	171.4	171.8	227.5	228.4	233.3	30.31	30.62	37.32	40.1	41.2	42.1	90.7	89.0	88.6
Cash registers, adding machines, and calculating machines	170.3	167.5	162.6	223.1	214.0	216.2	40.76	39.74	41.34	44.6	43.9	45.3	91.8	91.6	92.4
Electrical machinery, apparatus, and supplies	167.4	163.8	158.8	240.0	232.0	224.0	37.44	37.06	37.01	43.9	43.5	43.9	85.3	85.0	84.2
Engines, turbines, water wheels, and windmills	314.2	297.8	285.5	540.8	503.8	484.7	45.77	44.87	45.03	46.2	46.5	46.7	98.6	96.6	96.7

Foundry and machine-shop products.....	143.6	142.6	139.1	182.3	176.5	177.8	37.72	36.01	37.78	45.6	44.6	46.1	82.6	81.8	81.9
Machine tools.....	351.5	346.0	338.5	553.4	534.7	520.3	33.53	32.80	43.22	51.2	50.9	52.0	85.0	84.1	85.0
Radio and phonographs.....	202.4	188.7	180.7	135.8	215.7	200.4	28.32	28.30	27.09	41.2	40.9	40.9	68.7	69.3	69.4
Textile machinery and parts.....	108.4	106.3	103.8	135.8	132.7	130.5	34.49	34.31	34.84	46.6	46.5	46.8	74.4	74.2	74.5
Typewriters and parts.....	155.7	153.1	148.3	222.3	217.2	207.5	35.01	34.77	34.31	46.4	45.8	45.8	75.4	74.9	74.9
<b>Transportation equipment<sup>1</sup>.....</b>	<b>171.4</b>	<b>178.5</b>	<b>178.1</b>	<b>234.1</b>	<b>239.3</b>	<b>240.4</b>	<b>41.24</b>	<b>40.51</b>	<b>42.70</b>	<b>41.9</b>	<b>43.8</b>	<b>43.8</b>	<b>99.0</b>	<b>98.8</b>	<b>97.6</b>
Aircraft.....	7,959.9	7,280.0	6,733.8	10,462.0	9,077.7	8,212.1	38.46	35.48	35.63	45.6	44.7	45.0	85.5	82.0	79.7
Automobiles.....	109.3	126.9	134.8	137.3	158.0	188.3	41.14	40.79	43.68	39.0	38.3	43.0	105.7	106.6	106.3
Cars, electric- and steam-railroad.....	89.2	89.0	85.1	93.7	90.8	92.9	33.29	32.43	34.73	39.4	41.7	41.7	84.4	81.6	83.3
Locomotives.....	78.9	75.7	68.1	104.9	102.5	90.8	40.74	41.49	40.87	46.1	46.3	46.3	88.4	89.6	87.9
Shipbuilding.....	388.3	375.3	337.9	614.6	582.0	504.4	46.47	45.54	43.83	44.4	44.8	45.4	103.9	101.3	95.4
<b>Nonferrous metals and their products.....</b>	<b>145.7</b>	<b>143.5</b>	<b>141.9</b>	<b>192.0</b>	<b>174.1</b>	<b>174.6</b>	<b>34.99</b>	<b>35.81</b>	<b>34.30</b>	<b>43.0</b>	<b>42.0</b>	<b>43.1</b>	<b>80.8</b>	<b>80.3</b>	<b>79.4</b>
Aluminum manufactures.....	238.9	233.7	228.4	342.8	319.8	321.1	35.67	34.17	35.09	42.6	40.8	42.2	84.1	83.1	83.1
Brass, bronze, and copper products.....	192.8	189.7	189.5	273.9	263.9	262.4	38.11	38.55	38.42	45.0	44.2	44.7	88.1	87.8	86.2
Clocks and watches and time-recording devices.....	117.6	118.3	117.0	145.8	138.4	147.9	27.37	25.83	27.93	40.0	38.5	42.4	68.4	67.1	65.9
Jewelry.....	117.9	111.6	106.8	113.1	105.2	101.4	25.72	25.31	25.61	42.5	41.5	41.3	60.7	61.0	61.2
Lighting equipment.....	115.7	116.4	114.1	122.4	117.8	117.4	33.08	31.46	31.87	42.0	40.5	41.3	78.3	77.7	77.2
Silverware and plated ware.....	84.8	83.4	83.9	94.4	87.4	93.8	32.33	32.39	32.32	44.1	42.1	44.0	74.1	73.7	74.4
Smelting and refining—copper, lead, and zinc.....	103.5	102.7	101.8	118.4	116.7	116.6	32.29	32.00	32.28	39.5	39.4	40.5	81.7	81.3	79.8
<b>Lumber and allied products.....</b>	<b>81.0</b>	<b>79.5</b>	<b>76.8</b>	<b>92.5</b>	<b>85.5</b>	<b>83.9</b>	<b>24.72</b>	<b>23.21</b>	<b>23.57</b>	<b>41.8</b>	<b>39.9</b>	<b>40.9</b>	<b>58.8</b>	<b>57.7</b>	<b>57.0</b>
Furniture.....	108.4	105.6	103.8	116.1	110.1	110.0	25.43	24.08	25.12	42.5	41.4	42.4	60.2	60.1	59.7
Lumber.....	78.1	75.7	72.5	74.9	68.3	67.2	26.28	24.74	25.24	43.3	41.7	42.5	61.2	59.3	59.4
Millwork.....	70.7	70.0	67.1	80.6	73.5	71.1	23.58	21.60	21.89	41.1	38.6	39.7	57.4	56.0	55.2
Sawmills.....	101.3	99.6	97.1	104.1	98.9	100.2	27.97	26.97	28.04	38.5	37.4	38.6	72.1	72.0	71.7
Stone, clay, and glass products.....	79.4	77.6	74.7	77.0	73.4	71.8	25.30	24.59	24.97	38.9	38.2	38.8	64.6	64.5	64.2
Brick, tile, and terra cotta.....	83.4	82.4	79.2	93.6	90.6	89.5	31.82	31.00	31.93	40.7	40.2	41.6	77.8	77.1	76.7
Cement.....	130.0	127.9	125.5	155.4	147.1	153.5	29.28	28.19	29.91	37.6	36.1	38.5	78.2	78.2	78.0
Glass.....	44.4	45.1	45.5	35.9	34.8	34.8	28.36	27.05	26.71	38.2	36.8	36.8	73.2	73.3	72.6
Marble, granite, slate, and other products.....	119.4	116.7	114.4	124.1	114.9	118.2	26.22	24.90	26.06	38.3	36.5	38.1	68.7	68.3	68.1
Pottery.....	115.5	113.2	112.6	119.5	113.6	111.4	21.04	20.54	20.83	38.1	37.4	38.1	55.4	55.0	53.4
<b>Textiles and their products.....</b>	<b>106.9</b>	<b>107.0</b>	<b>106.2</b>	<b>114.5</b>	<b>113.3</b>	<b>111.6</b>	<b>20.63</b>	<b>20.42</b>	<b>20.28</b>	<b>38.9</b>	<b>38.5</b>	<b>39.1</b>	<b>52.2</b>	<b>53.4</b>	<b>52.2</b>
Fabrics.....	90.6	89.0	89.9	93.8	89.5	90.2	28.47	27.77	27.71	39.7	39.2	39.3	71.8	70.9	70.6
Carpets and rugs.....	109.9	109.1	108.5	126.2	123.0	120.0	18.58	18.25	17.87	39.4	38.8	39.6	47.2	47.1	45.1
Cotton goods.....	106.5	105.2	103.7	123.5	120.6	116.2	22.70	22.29	21.75	41.2	40.9	41.5	54.8	54.6	52.5
Cotton smallwares.....	136.3	139.0	139.3	132.5	134.3	133.2	23.57	23.43	23.21	40.1	40.0	40.2	58.2	58.0	57.2
Dyeing and finishing textiles.....	81.9	83.6	82.7	90.3	91.4	85.8	30.48	29.97	28.60	37.0	38.0	36.1	82.7	80.5	80.2
Hats, fur-felt.....	141.5	143.4	142.7	154.5	159.9	158.1	19.51	19.93	19.70	36.2	36.3	36.2	54.0	55.2	54.5
Hosiery.....	81.3	80.8	79.4	77.3	75.0	74.9	19.70	19.29	19.65	38.6	37.9	38.8	50.3	50.3	49.9
Knitted outerwear.....	86.4	85.7	79.3	90.8	91.0	82.8	17.75	17.80	17.61	38.5	38.8	38.5	45.8	46.1	45.7
Knitted underwear.....	160.6	159.4	160.2	157.1	153.5	153.6	22.45	22.06	21.87	40.3	39.9	40.3	54.4	53.9	53.0
Knitted cloth.....	67.9	69.3	66.3	64.1	64.0	64.1	19.37	19.00	18.95	37.8	37.4	38.6	50.8	50.6	48.8
Silk and rayon goods.....	108.9	109.0	107.9	118.5	116.8	116.9	25.21	24.75	25.10	39.6	39.5	40.1	63.6	62.8	62.8
Woolen and worsted goods.....															

See footnotes at end of table.



book and job. 105.5 105.4 101.7 98.5 94.8 32.21 32.24 32.30 39.9 39.9 39.7 81.5 82.6  
 Newspapers and periodicals. 114.7 114.8 117.4 109.8 113.6 38.88 38.93 39.39 35.7 35.6 35.8 107.0 106.8  
 106.9

Chemical, petroleum, and coal products <sup>a</sup>.

Petroleum refining	141.8	138.9	136.8	179.2	175.9	172.4	33.64	33.51	33.63	40.0	40.0	40.5	83.7	83.8	82.4
Other than petroleum refining	127.9	127.7	126.2	159.1	157.2	156.7	38.57	38.26	38.74	38.0	37.4	38.2	102.5	103.0	102.0
Chemicals	145.2	141.7	139.6	185.4	181.7	177.2	31.91	32.25	31.79	40.6	40.8	41.2	78.0	77.7	76.1
Cottonseed—oil, cake, and meal	180.1	175.8	172.1	247.3	239.7	232.6	36.65	36.38	36.00	41.3	41.0	41.7	88.7	88.6	86.4
Druggists' preparations	70.9	63.4	66.3	65.1	60.0	62.4	14.82	15.23	15.17	38.7	40.0	40.4	37.1	36.4	35.9
Explosives	134.4	128.7	127.4	164.9	162.8	149.9	27.47	28.33	26.43	40.4	41.5	41.0	64.6	64.5	62.7
Fertilizers	( <sup>b</sup> )	( <sup>b</sup> )	( <sup>b</sup> )	( <sup>b</sup> )	( <sup>b</sup> )	( <sup>b</sup> )	38.46	38.48	38.31	43.0	42.8	43.0	89.4	89.9	89.1
Paints and varnishes	89.6	90.5	92.1	90.8	89.6	93.0	18.67	18.11	18.20	36.1	36.7	37.4	51.7	49.4	48.6
Rayon and allied products	144.7	145.5	144.8	171.3	172.7	177.8	32.58	32.63	33.81	41.7	41.8	43.4	78.5	78.1	78.0
Soap	329.3	324.4	327.0	368.2	368.6	362.4	28.60	29.06	28.35	39.3	39.8	39.3	72.8	72.9	72.2
	97.4	96.0	93.3	129.7	133.3	129.0	33.08	32.72	32.58	41.3	41.2	41.1	80.0	79.4	79.3
Rubber products	111.8	111.4	110.7	138.9	135.6	141.1	33.92	33.18	34.70	39.4	39.2	41.4	86.1	84.5	83.6
Rubber boots and shoes	79.4	79.3	78.2	102.2	94.2	98.4	29.60	27.31	28.91	41.4	40.1	43.0	71.4	68.0	67.2
Rubber tires and inner tubes	86.7	87.4	86.3	116.5	118.4	122.4	39.20	39.54	41.41	37.0	37.8	39.9	106.2	104.8	103.7
Rubber goods other	192.9	189.2	190.0	228.3	213.8	224.6	28.76	27.41	28.61	41.3	40.5	42.3	70.0	68.0	68.0

See footnotes at end of table.



TABLE 3.—Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries—Continued

## NONMANUFACTURING

[Indexes are based on 12-month average, 1929=100 except for class I railroads, which are based on 1935-39 as 100]

Industry	Employment index			Pay-roll index			Average weekly earnings <sup>1</sup>			Average hours worked per week <sup>1</sup>			Average hourly earnings <sup>1</sup>		
	Aug. 1941	July 1941	June 1941	Aug. 1941	July 1941	June 1941	Aug. 1941	July 1941	June 1941	Aug. 1941	July 1941	June 1941	Aug. 1941	July 1941	June 1941
Coal mining:															
Anthracite <sup>9 10</sup>	50.0	49.3	49.2	51.1	34.8	51.2	\$33.56	\$23.25	\$34.20	33.8	23.2	34.0	98.9	99.8	100.2
Bituminous <sup>9</sup>	92.6	90.3	88.1	116.6	105.4	107.2	33.68	31.22	32.37	32.4	28.7	31.7	103.3	102.8	102.3
Metalliferous mining <sup>11</sup>	80.0	79.0	78.9	86.5	79.3	85.3	34.05	31.62	34.07	41.8	39.6	42.7	81.1	79.5	80.2
Quarrying and nonmetallic mining	53.9	52.7	51.9	59.2	55.5	55.7	27.82	26.67	27.19	43.8	42.0	42.8	63.7	63.5	63.5
Crude-petroleum production <sup>12</sup>	62.3	62.1	61.5	61.3	61.4	59.9	35.83	36.05	35.67	38.2	38.1	37.1	92.2	93.0	93.5
Public utilities:															
Telephone and telegraph <sup>13 14</sup>	89.1	88.3	86.3	115.6	115.7	113.0	31.70	32.04	32.02	40.1	40.5	40.2	79.5	79.6	80.2
Electric light and power <sup>13 14</sup>	95.3	94.6	93.5	115.2	113.5	111.4	36.76	36.50	36.44	40.4	39.9	39.3	91.2	91.9	92.9
Street railways and busses <sup>13 14 15</sup>	69.6	69.5	69.1	77.8	75.8	76.2	36.38	35.54	35.91	47.3	46.3	47.7	75.9	75.7	74.5
Trade:															
Wholesale <sup>13 16</sup>	95.7	94.2	93.8	89.2	88.0	88.4	32.38	32.45	32.57	41.2	40.9	41.4	79.1	79.7	79.8
Retail <sup>13 14</sup>	96.4	96.7	97.8	93.6	94.0	95.2	22.50	22.54	22.31	42.6	42.6	42.8	57.4	57.2	57.2
Food <sup>14</sup>	108.3	108.7	108.5	105.7	105.5	104.0	24.90	24.72	24.61	42.7	42.6	42.6	57.2	56.8	55.1
General merchandising <sup>13 14</sup>	101.5	100.9	105.1	97.8	97.5	100.1	19.03	19.15	18.75	38.4	38.9	38.7	48.7	48.6	48.0
Apparel <sup>14</sup>	80.1	80.7	90.3	77.2	78.0	85.6	22.51	22.54	21.95	38.4	38.5	38.0	58.5	58.5	57.6
Furniture <sup>14</sup>	77.8	78.9	79.3	75.5	76.0	77.8	30.22	29.94	30.59	44.0	43.7	44.4	72.7	72.2	74.0
Automotive <sup>14</sup>	93.3	94.4	93.9	95.8	99.1	102.7	31.11	31.11	32.31	47.1	47.0	48.0	65.8	67.1	68.7
Lumber <sup>14</sup>	83.2	81.6	80.0	85.5	82.3	81.0	28.79	28.21	28.26	43.0	42.8	43.0	68.1	67.2	66.4
Hotels (year-round) <sup>9 13 17</sup>	94.8	94.5	95.0	89.0	87.6	87.4	16.23	16.03	15.86	46.3	46.1	45.8	34.7	34.6	34.2
Laundries <sup>9</sup>	114.6	115.8	112.0	104.7	106.7	102.5	19.00	19.15	19.09	43.3	43.6	43.7	44.1	43.9	43.9
Dyeing and cleaning <sup>9</sup>	118.5	121.7	122.7	91.6	96.4	98.4	21.39	21.92	22.27	43.1	43.8	44.7	50.8	50.8	50.6
Brokerage <sup>13 19</sup>	+7	+5	-9	+3	+7	+8	39.48	39.57	39.32	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )
Insurance <sup>13 19</sup>	+6	+8	-3	+3	-3	+8	37.26	37.37	37.65	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )
Building construction <sup>18</sup>	+2.1	+3.4	+3.3	+3.3	+4.3	+4.2	35.76	35.38	35.15	35.7	35.4	35.3	100.1	100.0	99.7
Water transportation <sup>20</sup>	79.3	78.6	80.3	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )
Class I steam railroads <sup>21</sup>	118.3	116.3	113.3	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )

<sup>1</sup> Mimeographed sheets giving averages by years, 1932 to 1939, inclusive, and by months, January 1938 to August 1940, inclusive, available on request. A average hours and average hourly earnings are computed from data supplied by a smaller number of establishments than average weekly earnings, as not all reporting firms furnish man-hours. The figures are not strictly comparable from month to month because of changes in the size and composition of the reporting sample.

<sup>2</sup> See tables 9, 10, and 11 in the December 1940 issue of "Employment and Pay Rolls" for comparable series back to January 1919 for all manufacturing and back to January 1923 for the durable- and nondurable-goods groups.

<sup>3</sup> Revisions in the following industries and groups have been made as indicated:

*Forgings, iron and steel.*—March, April, and May, 1941 average weekly earnings to \$38.19, \$38.37, \$40.45; hours to 45.8, 45.5, 46.4; hourly earnings to 83.5, 84.6, 87.3 cents; employment indexes to 97.4, 99.8; 102.7; April and May pay-roll indexes to 141.0 and 153.2.

*Tools, not edge.*—May 1941 average weekly and hourly earnings to \$32.28 and 70.2 cents; employment and pay-roll indexes to 135.4 and 172.1.

*Cars, electric- and steam-railroad.*—April and May 1941 average weekly earnings to \$32.14 and \$34.16; hours to 40.3 and 41.6; hourly earnings to 79.7 and 82.2 cents; pay-roll indexes to 74.3 and 85.3.

*Shipbuilding.*—April and May average weekly earnings to \$39.17 and \$41.00; hours to 42.8 and 43.9; employment indexes to 295.4 and 310.1; pay-roll indexes to 395.0 and 433.5.

*Dyeing and finishing textiles.*—April and May 1941 average weekly hours to 40.3 and 40.2; hourly earnings to 56.1 and 56.9 cents.

*Transportation-equipment group.*—April and May 1941 employment indexes to 166.5 and 172.0; pay-roll indexes to 191.8 and 217.1.

*Chemical, petroleum, and coal-products group.*—October 1940 to May 1941 employment indexes to 125.4, 125.3, 125.7, 126.3, 128.5, 131.6, 135.7, 135.4; November and December 1940 pay-roll indexes to 139.4, 143.9; February, March, April, and May 1941 pay-roll indexes to 144.8, 149.1, 158.3, 164.9.

*Chemicals, other than petroleum-refining subgroup.*—October 1940 to May 1941 employment indexes to 126.5, 126.4, 127.1, 128.1, 130.8, 134.6, 139.4, 138.6; October, November, and December pay-roll indexes to 140.2, 141.2, 145.4; February, March, April, and May, 1941 pay-roll indexes to 148.7, 154.0, 163.2, 170.7.

<sup>4</sup> See table 7 in the April 1941 issue of "Employment and Pay Rolls" for revised figures from January 1940 to March 1941.

<sup>5</sup> Adjusted on basis of a complete employment survey of the aircraft industry made

by the Bureau of Labor Statistics for August 1940. Not comparable with previously published indexes from January 1939 to August 1940, inclusive. Comparable figures for this period given in table 9 of the September 1940 issue of "Employment and Pay Rolls."

<sup>6</sup> The indexes for "Automobiles" have been adjusted to 1933 census figures, but not to later census figures because of problems involving integrated industries.

<sup>7</sup> See table 8 in March 1941 "Employment and Pay Rolls" pamphlet for revised figures from January 1935 to February 1941.

<sup>8</sup> Not available.

<sup>9</sup> Indexes adjusted to 1935 census. Comparable series back to January 1929 presented in January 1938 issue of "Employment and Pay Rolls."

<sup>10</sup> See table 7 of October 1940 "Employment and Pay Rolls" for revised employment and pay-roll indexes, average hours worked per week, average hourly earnings, and average weekly earnings in anthracite mining, February 1940 to September 1940, inclusive.

<sup>11</sup> See table 7 of February 1941 pamphlet for revised figures for metalliferous mining from January 1938 to January 1941, inclusive.

<sup>12</sup> Does not include well drilling or rig building.

<sup>13</sup> Average weekly earnings, hourly earnings, and hours not comparable with figures published in pamphlets prior to January 1938 as they now exclude corporation officers, executives, and other employees whose duties are mainly supervisory.

<sup>14</sup> Retail-trade indexes adjusted to 1935 census and public-utility indexes to 1937 census. Not comparable to indexes published in pamphlets prior to January 1940 or in Monthly Labor Reviews prior to April 1940, with but one exception, retail furniture, which has been revised since publication of July 1940 pamphlet back to January 1936. Comparable series for earlier months available upon request.

<sup>15</sup> Covers street-railways and trolley and motorbus operations of subsidiary, affiliated, and successor companies; formerly "electric-railroad and motorbus operation and maintenance."

<sup>16</sup> Indexes adjusted to 1933 census. Comparable series in November 1934 and subsequent issues of "Employment and Pay Rolls."

<sup>17</sup> Cash payments only; additional value of board, room, and tips not included.

<sup>18</sup> Indexes of employment and pay rolls are not available; percentage changes from preceding month substituted.

<sup>19</sup> See footnote 18 in table 10 in the July 1941 issue of "Employment and Pay Rolls" for revised average weekly earnings in the brokerage industry from January 1939 to January 1941.

<sup>20</sup> Based on estimates prepared by the United States Maritime Commission.

<sup>21</sup> Preliminary—Source: Interstate Commerce Commission.

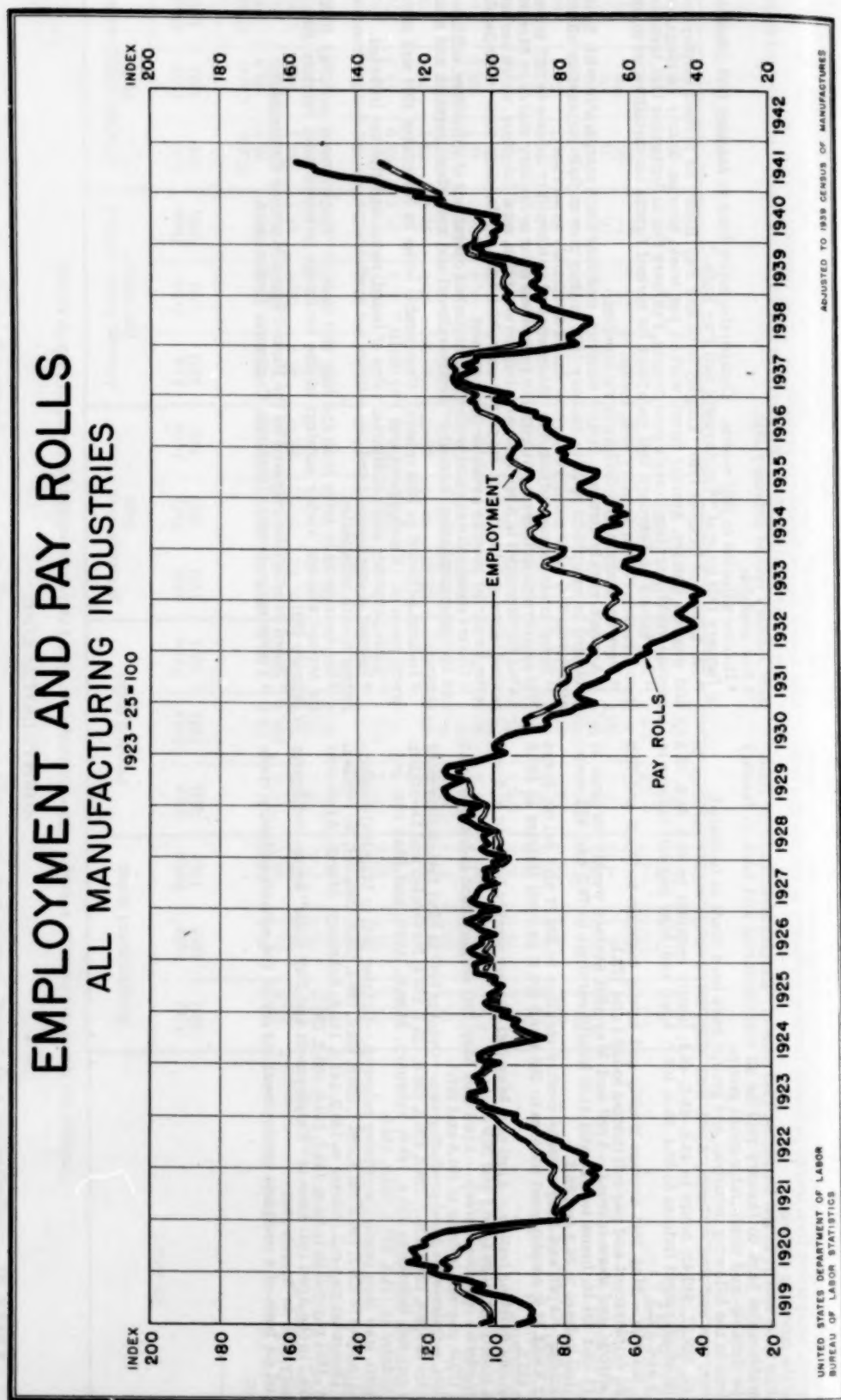


TABLE 4.—Indexes of Employment and Pay Rolls in Fifty-five Additional Manufacturing Industries

[12-month average, 1939=100]

Industry	Employment			Pay rolls		
	August 1941	July 1941	June 1941	August 1941	July 1941	June 1941
Iron and steel group:						
Metal doors and shutters.....	145.7	138.6	133.9	196.4	191.0	170.3
Firearms.....	(1)	(1)	(1)	(1)	(1)	(1)
Screw-machine products.....	200.2	197.9	191.1	273.8	263.1	263.5
Wire drawing <sup>1</sup> .....	138.2	136.2	136.1	170.6	171.8	171.0
Wrought pipe not made in rolling mills.....	151.7	156.3	156.5	192.7	184.7	200.2
Steel barrels, kegs, and drums <sup>1</sup> .....	142.3	140.2	134.4	185.2	175.1	181.6
Machinery group:						
Machine-tool accessories.....	237.3	229.0	222.0	312.2	295.6	278.7
Pumps <sup>1</sup> .....	194.5	188.3	183.1	285.2	261.5	268.1
Refrigerators and refrigerating apparatus.....	143.8	152.1	154.8	184.8	180.4	186.1
Sewing machines.....	130.1	129.7	128.2	197.6	190.2	194.1
Washing machines, wringers, and driers.....	124.5	138.7	139.1	155.1	174.5	180.0
Transportation-equipment group:						
Motorcycles, bicycles, and parts <sup>2</sup> .....	168.0	167.0	168.4	204.4	204.2	208.8
Nonferrous-metals group:						
Sheet-metal work.....	148.7	147.2	142.9	190.0	182.0	179.9
Smelting and refining of scrap metal.....	147.1	147.0	142.1	188.4	172.5	167.6
Lumber group:						
Caskets and morticians' goods.....	102.7	101.8	100.3	113.8	110.6	108.5
Wood preserving.....	124.5	120.6	121.8	161.0	149.7	152.9
Wood turned and shaped <sup>1</sup> .....	113.7	117.3	110.1	134.4	132.9	129.5
Wooden boxes, other than cigar.....	122.8	126.3	126.9	164.1	158.2	161.4
Mattresses and bedsprings.....	130.0	128.0	123.7	156.6	155.7	146.2
Stone, clay, and glass products group:						
Abrasive wheels <sup>1</sup> .....	186.9	182.9	179.9	234.8	221.4	225.4
Asbestos products <sup>1</sup> .....	146.2	133.2	138.4	191.4	162.9	174.0
Lime.....	123.3	123.7	124.0	160.2	152.2	153.2
Gypsum <sup>1</sup> .....	109.1	105.2	120.2	148.3	133.0	145.6
Glass products made from purchased glass.....	148.1	141.1	140.8	167.3	156.1	157.0
Wallboard and plaster, except gypsum.....	142.7	138.0	133.6	181.1	165.0	156.2
Textiles:						
Textile bags <sup>1</sup> .....	113.0	111.6	110.8	131.9	129.6	123.1
Cordage and twine <sup>1</sup> .....	137.2	135.9	133.0	180.8	178.7	170.5
Curtains, draperies, and bedspreads.....	111.0	103.9	99.1	164.2	126.2	115.3
Housefurnishings, other.....	134.0	135.2	147.6	166.3	158.4	168.7
Jute goods, except felt.....	131.9	128.4	126.1	175.0	162.4	159.5
Handkerchiefs.....	106.4	106.2	103.3	130.1	122.0	119.6
Leather group:						
Boot and shoe cut stock and findings.....	108.4	108.6	106.3	129.1	131.1	127.4
Leather gloves and mittens.....	149.9	143.8	141.3	194.0	184.0	179.0
Trunks and suitcases.....	170.5	159.0	150.6	164.8	147.7	148.3
Food group:						
Cereal preparations.....	120.1	121.4	109.8	143.9	137.1	125.5
Condensed and evaporated milk.....	123.7	126.0	124.8	142.6	143.0	146.7
Feeds, prepared.....	111.6	114.6	109.6	126.6	139.5	127.0
Paper and printing group:						
Paper bags.....	130.2	123.6	120.8	153.2	147.1	146.7
Envelopes.....	120.5	116.9	115.5	132.7	128.3	128.4
Paper goods, not elsewhere classified.....	126.8	123.1	121.1	144.6	138.5	137.1
Bookbinding.....	116.0	110.8	92.3	148.3	134.1	110.7
Lithographic.....	106.5	105.4	104.2	121.5	114.0	113.1
Chemical, petroleum, and coal products group:						
Ammunition.....	(1)	(1)	(1)	(1)	(1)	(1)
Compressed and liquefied gases.....	140.4	141.3	139.5	167.0	177.2	179.0
Perfumes and cosmetics.....	107.3	100.9	98.1	116.9	113.0	100.5
Coke-oven products.....	126.2	125.7	122.1	147.5	147.7	145.7
Paving materials.....	127.0	131.3	117.6	158.8	160.2	139.6
Roofing materials.....	135.4	132.9	128.8	169.2	169.8	165.4

See footnotes at end of table.



TABLE 4.—*Indexes of Employment and Pay Rolls in Fifty-five Additional Manufacturing Industries—Continued*

[12-month average, 1939=100]

Industry	Employment			Pay rolls		
	August 1941	July 1941	June 1941	August 1941	July 1941	June 1941
Miscellaneous group:						
Chemical fire extinguishers <sup>1</sup>	301.4	276.8	258.5	432.1	383.9	360.4
Buttons	116.2	112.6	112.4	148.2	135.5	139.3
Instruments, professional, scientific, and commercial	200.0	192.2	185.5	242.1	246.4	231.1
Optical goods	173.6	168.1	166.3	204.2	198.1	196.4
Photographic apparatus	126.9	123.9	120.4	156.4	149.1	154.3
Pianos, organs, and parts	126.1	123.2	121.5	144.6	137.6	133.2
Toys, games, and playground equipment	144.6	136.0	134.7	157.1	145.3	145.8

<sup>1</sup> Not available.<sup>2</sup> Revisions of employment and pay-roll indexes in the following industries have been made as indicated:

Wire drawing—April and May employment to 136.3, 136.9; pay roll to 158.0, 168.7.

Steel barrels, kegs, and drums—April and May employment to 117.8, 129.9; pay roll to 146.1, 168.6.

Pumps—March, April, and May employment to 157.9, 165.4, 173.8; pay roll to 203.8, 218.5, 243.0.

Motorcycles, bicycles, and parts—April and May employment to 148.0, 159.8; pay roll to 169.4, 185.7.

Wood turned and shaped—May employment to 115.8; April and May pay roll to 135.3 and 136.3.

Abrasive wheels—December, January, February, March, April, and May employment to 144.6, 150.7, 156.1, 163.4, 171.8, 177.1; pay roll to 159.3, 157.5, 171.0, 181.6, 202.6, 221.4.

Asbestos products—April and May employment to 121.8, 127.2; pay roll to 140.8, 158.9.

Gypsum—April and May employment to 110.5, 116.7; pay roll to 126.1, 134.0.

Textile bags—April and May employment to 111.0 and 110.4; April pay roll to 119.7.

Cordage and twine—February, March, April, and May employment to 117.3, 119.8, 124.4 and 128.7; January, February, March, April, and May pay roll to 121.1, 129.7, 137.8, 147.9, and 160.3.

Chemical fire extinguishers—April and May employment to 225.2, 241.5; pay roll to 273.1, 332.8.

TABLE 5.—Indexes of Employment and Pay Rolls in Selected Manufacturing<sup>1</sup> and Nonmanufacturing<sup>2</sup> Industries, August 1940 to August 1941

Industry	1940						1941							
	Av.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
<b>Employment</b>														
<b>Manufacturing</b>														
All industries.....	107.5	107.4	111.4	113.8	114.7	116.2	115.5	117.8	119.9	122.6	124.9	127.9	130.5	132.8
Durable goods <sup>3</sup> .....	104.3	102.4	108.2	112.8	115.5	117.7	118.3	121.0	123.7	127.7	131.3	135.1	137.7	138.4
Nondurable goods <sup>4</sup> .....	110.6	112.2	114.4	114.8	113.8	114.8	112.7	114.7	116.3	117.8	118.8	121.1	123.7	127.5
<b>Nonmanufacturing</b>														
Anthracite mining <sup>5</sup> .....	50.7	49.9	49.8	49.4	50.4	50.8	50.3	50.6	50.2	48.7	48.6	49.2	49.3	50.0
Bituminous-coal mining <sup>5</sup> .....	88.0	86.6	87.7	89.2	89.8	90.1	90.2	90.6	91.1	23.5	87.9	88.1	90.3	92.6
Metalliferous mining <sup>5</sup> .....	69.9	71.5	72.5	72.6	72.5	72.2	72.5	73.4	74.3	77.2	77.1	78.9	79.0	80.0
Quarrying and nonmetallic mining.....	45.3	48.5	48.9	48.8	47.2	45.4	41.7	42.4	44.2	48.2	51.0	51.9	52.7	53.9
Crude-petroleum production.....	62.9	63.6	63.0	62.4	61.3	60.7	60.3	60.4	60.2	60.1	60.3	61.5	62.1	62.3
Telephone and telegraph <sup>7</sup> .....	77.9	79.0	78.9	79.1	79.2	79.7	80.4	80.9	81.8	83.2	84.6	86.3	88.3	89.1
Electric light and power <sup>7</sup> .....	91.1	93.0	92.7	92.3	91.8	91.3	90.5	90.1	90.3	91.3	92.2	93.5	94.6	95.3
Street railways and busses <sup>8</sup> .....	68.5	68.4	68.5	68.7	68.7	68.4	68.3	68.0	68.2	68.3	68.9	69.1	69.5	69.6
Wholesale trade.....	90.4	90.1	90.9	91.0	91.8	92.5	91.2	91.4	91.8	92.4	92.2	93.8	94.2	95.7
Retail trade <sup>7</sup> .....	92.3	88.7	92.8	94.3	96.3	108.1	90.5	90.7	92.5	97.8	96.1	97.8	96.7	96.4
Year-round hotels <sup>9</sup> .....	92.0	90.3	91.6	93.4	92.3	92.6	92.9	93.9	94.2	95.2	96.3	95.0	94.5	94.8
Laundries <sup>9</sup> .....	99.5	102.8	101.9	100.2	99.7	100.3	101.4	101.1	102.5	104.9	108.3	112.0	115.8	114.6
Dyeing and cleaning <sup>9</sup> .....	104.7	106.7	110.0	109.4	106.0	103.3	101.0	101.4	104.4	117.2	120.6	122.7	121.7	118.5
<b>Pay rolls</b>														
<b>All industries</b>	105.4	105.5	111.6	116.2	116.4	122.4	120.7	126.8	131.2	134.7	144.1	152.2	152.6	157.8
Durable goods <sup>3</sup> .....	107.8	106.5	115.1	123.4	125.1	131.7	132.0	139.3	144.6	149.9	163.1	173.9	172.3	177.1
Nondurable goods <sup>4</sup> .....	102.7	104.4	107.7	108.1	106.6	112.1	108.1	112.9	116.3	117.7	122.9	127.9	130.7	136.2
<b>Nonmanufacturing</b>														
Anthracite mining <sup>5</sup> .....	38.5	33.1	39.3	32.3	37.6	42.7	38.5	45.2	42.4	24.3	33.4	51.2	34.8	51.1
Bituminous-coal mining <sup>5</sup> .....	81.2	82.5	83.2	83.6	84.5	91.4	87.8	90.8	93.8	15.5	103.4	107.2	105.4	116.6
Metalliferous mining <sup>5</sup> .....	66.7	68.5	69.5	71.3	69.8	72.8	70.4	71.8	72.7	78.9	81.5	85.3	79.3	86.5
Quarrying and nonmetallic mining.....	40.5	45.2	46.2	46.7	42.3	42.4	36.9	38.2	40.3	47.0	53.2	55.7	55.5	59.2
Crude-petroleum production.....	58.2	59.0	58.2	57.6	56.8	55.9	55.7	57.3	56.1	57.8	58.6	59.9	61.4	61.3
Telephone and telegraph <sup>7</sup> .....	100.2	100.4	101.8	102.2	103.2	103.5	103.9	104.3	106.4	107.3	110.5	113.0	115.7	115.6
Electric light and power <sup>7</sup> .....	104.8	108.1	105.8	107.0	106.9	106.0	105.1	105.4	106.1	107.6	109.6	111.4	113.5	115.2
Street railways and busses <sup>8</sup> .....	70.4	70.4	71.5	70.7	70.3	73.1	70.7	71.0	72.5	72.0	72.7	76.2	75.8	77.8
Wholesale trade.....	79.0	78.7	81.1	80.2	80.7	83.4	80.5	81.4	82.0	83.4	84.6	88.4	88.0	89.2
Retail trade <sup>7</sup> .....	84.2	81.5	85.1	85.8	87.1	97.3	83.7	84.6	86.2	91.7	91.5	95.2	94.0	93.6
Year-round hotels <sup>9</sup> .....	82.4	80.7	81.8	84.2	83.6	84.1	84.1	86.1	85.7	87.1	87.9	87.4	87.6	89.0
Laundries <sup>9</sup> .....	87.7	90.5	89.9	88.0	87.2	89.2	89.8	89.7	90.9	95.8	98.7	102.5	106.7	104.7
Dyeing and cleaning <sup>9</sup> .....	78.2	78.9	85.6	82.4	77.8	75.8	73.3	74.4	77.2	97.8	96.1	98.4	96.4	91.6

<sup>1</sup> 13-year average 1923-25=100—adjusted to preliminary 1939 Census of Manufactures. See tables 9, 10, and 11 of December 1940 Employment and Pay Rolls for comparable figures back to January 1919 for "all manufacturing" and January 1923 for "durable goods" and "nondurable goods."

<sup>2</sup> 12-month average for 1929=100. Comparable indexes for wholesale trade, quarrying, metal mining, and crude-petroleum production are in November 1934 and subsequent issues of Employment and Pay Rolls or in February 1935 and subsequent issues of Monthly Labor Review. For other nonmanufacturing indexes see notes 5, 6, and 7.

<sup>3</sup> Includes: Iron and steel, machinery, transportation equipment, nonferrous metals, lumber and allied products, and stone, clay, and glass products.

<sup>4</sup> Includes: Textiles and their products, leather and its manufactures, food and kindred products, tobacco manufactures, paper and printing, chemicals and allied products, products of petroleum and coal, rubber products, and a number of miscellaneous industries not included in other groups.

<sup>5</sup> Indexes have been adjusted to the 1935 census. Comparable series from January 1929 forward are presented in January 1938 and subsequent issues of Employment and Pay Rolls. See also table 7 of October 1940 pamphlet for revised figures for anthracite mining February 1940 to September 1940.

<sup>6</sup> See table 7 of February 1941 pamphlet for revised indexes January 1938 to January 1941.

<sup>7</sup> Retail-trade indexes adjusted to 1935 census and public-utility indexes to 1937 census. Not comparable with indexes published in Employment and Pay Rolls pamphlets prior to January 1940 or in Monthly Labor Review prior to April 1940. Comparable series January 1929 to December 1939 available in mimeographed form.

<sup>8</sup> Covers street railways and trolley and motorbus operations of subsidiary, affiliated, and successor companies.

<sup>9</sup> Revised.

TABLE 6.—Indexes of Employment in Manufacturing Industries by Metropolitan Area  
[12-month average 1937=100]

Metropolitan area	Employment index		Percentage change July to August 1941	Employment index August 1940	Percentage change August 1940 to August 1941
	August 1941	July 1941			
Akron, Ohio.....	113.2	112.0	+1.1	84.5	+34.0
Albany, N. Y. <sup>1</sup> .....	112.5	111.0	+1.4	88.1	+27.7
Atlanta, Ga.....	105.3	103.6	+1.6	83.0	+26.9
Baltimore, Md.....	155.5	149.3	+4.2	114.0	+36.4
Birmingham, Ala.....	133.9	132.9	+ .8	108.5	+23.4
Boston, Mass. <sup>1</sup> .....	139.7	136.2	+2.6	104.5	+33.7
Cambridge, Mass.....	110.2	105.0	+5.0	86.3	+27.7
Lynn, Mass.....	176.6	170.5	+3.6	102.5	+72.3
Somerville, Mass.....	100.6	91.9	+9.5	86.0	+17.0
Boston city and outside <sup>1</sup> .....	140.8	138.0	+2.0	107.3	+31.2
Bridgeport, Conn.....	151.7	147.2	+3.1	100.2	+51.4
Buffalo, N. Y.....	141.9	140.9	+ .7	104.7	+35.5
Canton, Ohio.....	142.9	141.0	+1.3	98.3	+45.4
Chattanooga, Tenn.....	120.6	119.3	+1.1	95.5	+26.3
Chicago, Ill.....	129.2	126.8	+1.9	100.2	+28.9
Gary, Ind.....	124.9	123.3	+1.3	116.2	+7.5
Chicago city and outside.....	129.4	127.0	+1.9	99.3	+30.3
Cincinnati, Ohio.....	119.4	116.7	+2.3	91.2	+30.9
Cleveland, Ohio.....	133.7	131.9	+1.4	99.3	+34.6
Columbus, Ohio.....	130.5	128.2	+1.8	95.3	+36.9
Dallas, Tex.....	135.9	132.6	+2.5	94.3	+44.1
Dayton, Ohio.....	112.8	113.5	- .6	87.5	+28.9
Denver, Colo.....	121.6	117.8	+3.2	96.6	+25.9
Des Moines, Iowa.....	110.7	116.4	-4.9	107.9	+2.6
Detroit, Mich.....	87.4	90.6	-3.5	68.3	+28.0
Duluth, Minn.....	86.8	84.5	+2.7	72.3	+20.1
El Paso, Tex.....	98.1	98.1	0	88.2	+11.2
Erie, Pa.....	147.6	148.2	- .4	93.6	+57.7
Evansville, Ind.....	88.1	86.7	+1.6	82.7	+6.5
Flint, Mich.....	67.9	93.5	-27.4	70.4	-3.6
Fort Wayne, Ind.....	120.0	119.3	+ .6	79.3	+51.3
Fort Worth, Tex.....	108.8	105.6	+3.0	87.1	+24.9
Grand Rapids, Mich.....	134.5	133.8	+ .5	104.0	+29.3
Hartford, Conn.....	147.5	146.1	+1.0	105.4	+39.9
Houston, Tex.....	119.6	116.5	+2.7	97.3	+22.9
Indianapolis, Ind.....	140.1	136.2	+2.9	110.3	+27.0
Jacksonville, Fla.....	143.1	135.5	+5.6	108.2	+32.3
Kansas City, Mo.....	110.6	112.4	-1.6	83.8	+32.0
Kansas City, Kans.....	104.4	99.9	+4.5	92.7	+12.6
Kansas City, Mo., and outside.....	112.9	117.2	-3.7	80.5	+40.2
Knoxville, Tenn.....	117.7	116.4	+1.1	95.1	+23.8
Los Angeles, Calif.....	184.9	177.3	+4.3	117.6	+57.2
Long Beach, Calif.....	121.1	125.2	-3.3	86.7	+39.7
Los Angeles city and outside.....	186.6	180.3	+3.5	118.4	+57.6
Louisville, Ky.....	114.4	115.9	-1.3	95.8	+19.4
Lowell, Mass.....	107.7	111.8	-3.7	95.9	+12.3
Memphis, Tenn.....	115.7	113.5	+1.9	88.5	+30.7
Miami, Fla.....	84.1	80.8	+4.1	78.2	+7.5
Milwaukee, Wis.....	120.2	116.8	+2.9	89.2	+34.8
Minneapolis-St. Paul.....	119.2	118.7	+ .4	90.2	+32.2
St. Paul, Minn.....	123.4	126.2	-2.2	87.6	+40.9
Minneapolis city and outside.....	116.9	114.8	+1.8	91.6	+27.6
Nashville, Tenn.....	109.8	108.6	+1.1	91.1	+20.5
New Haven, Conn.....	140.5	138.7	+1.3	98.6	+42.5
New Orleans, La.....	133.9	132.4	+1.1	94.3	+42.0
New York and northeastern New Jersey <sup>1</sup> .....	127.6	127.9	- .2	104.8	+21.8
Newark, N. J.....	135.4	133.4	+1.5	105.4	+28.5
Jersey City, N. J.....	116.7	114.6	+1.8	99.4	+17.4
Paterson, N. J.....	152.7	151.9	+ .5	119.9	+27.4
Elizabeth, N. J.....	134.9	133.0	+1.4	102.5	+31.6
Yonkers, N. Y.....	118.6	114.1	+3.9	90.2	+31.5
New York City and outside <sup>1</sup> .....	126.6	128.3	-1.3	104.7	+20.9

See footnote at end of table.

TABLE 6.—Indexes of Employment in Manufacturing Industries by Metropolitan Area—Continued

[12-month average 1937=100]

Metropolitan area	Employment index		Percentage change July to August 1941	Employment index August 1940	Percentage change August 1940 to August 1941
	August 1941	July 1941			
Norfolk, Va. <sup>1</sup>	216.1	219.1	-1.4	149.9	+44.2
Oklahoma City, Okla.	113.2	106.9	+5.9	91.3	+24.0
Omaha, Nebr.	111.2	111.3	-.1	90.5	+22.9
Peoria, Ill.	115.0	111.1	+3.5	84.0	+36.9
Philadelphia, Pa. <sup>1</sup>	121.7	120.6	+.9	97.4	+24.9
Camden, N. J.	165.1	140.5	+17.5	141.0	+17.1
Philadelphia city and outside <sup>1</sup>	118.2	119.0	-.7	93.9	+25.9
Pittsburgh, Pa.	123.7	122.4	+1.1	100.2	+23.5
Portland, Oreg.	146.5	140.0	+4.6	93.3	+57.0
Providence, R. I. <sup>1</sup>	123.9	121.6	+1.9	98.1	+26.3
Fall River, Mass.	112.6	112.5	+.1	103.5	+8.8
New Bedford, Mass.	102.4	100.3	+2.1	72.0	+42.2
Providence city and outside <sup>1</sup>	131.4	128.6	+2.2	103.1	+27.4
Reading, Pa.	78.0	77.4	+.8	69.4	+12.4
Richmond, Va.	115.0	114.8	+.2	103.3	+11.3
Rochester, N. Y.	123.2	119.2	+3.4	99.9	+23.3
St. Louis, Mo.	119.1	118.6	+.4	93.2	+27.8
Salt Lake City, Utah.	93.5	95.7	-2.3	80.7	+15.9
San Antonio, Tex.	116.5	113.1	+3.0	107.8	+8.1
San Diego, Calif.	359.4	308.0	+16.7	186.3	+92.9
San Francisco, Calif. <sup>1</sup>	151.1	144.6	+4.5	109.2	+38.4
Oakland, Calif.	161.4	160.9	+.3	140.6	+14.8
San Francisco city and outside <sup>1</sup>	148.7	140.7	+5.7	101.8	+46.1
Scranton, Pa.	102.7	99.3	+3.4	89.3	+15.0
Seattle, Wash.	175.2	161.2	+8.7	119.8	+46.2
South Bend, Ind.	127.7	136.9	-6.7	92.3	+38.4
Spokane, Wash.	107.8	105.9	+1.8	105.3	+2.4
Springfield, Mass. <sup>1</sup>	132.4	131.5	+.7	96.5	+37.2
Syracuse, N. Y.	133.6	130.5	+2.4	103.8	+28.7
Tacoma, Wash.	121.0	113.6	+6.5	105.5	+14.7
Tampa, Fla.	128.2	123.5	+3.8	112.7	+13.8
Toledo, Ohio.	98.8	98.7	+.1	75.1	+31.6
Trenton, N. J.	136.9	133.3	+2.7	116.6	+17.4
Tulsa, Okla.	117.6	115.2	+2.1	94.5	+24.4
Utica, N. Y.	133.7	133.9	-.1	95.0	+40.7
Washington, D. C. <sup>1</sup>	154.0	154.6	-.4	112.3	+37.1
Wichita, Kans.	324.4	301.6	+7.6	121.2	+167.7
Wilmington, Del.	132.8	129.9	+2.2	95.6	+38.9
Worcester, Mass.	120.8	119.5	+1.1	97.7	+23.6
Youngstown, Ohio.	116.3	115.9	+.3	95.2	+22.2

<sup>1</sup> Includes employment in Government navy yards and arsenals.

## WAGE-RATE CHANGES IN AMERICAN INDUSTRIES

The following table gives information concerning wage-rate adjustments occurring during the month ending July 15, 1941, as shown by reports received from manufacturing and nonmanufacturing establishments which supply employment data to this Bureau.

As the Bureau's survey does not cover all establishments in an industry and furthermore, as some firms may have failed to report wage-rate changes, these figures should not be construed as representing the total number of wage changes occurring in manufacturing and nonmanufacturing industries.



TABLE 7.—Wage-Rate Changes Reported by Manufacturing and Nonmanufacturing Establishments During Month Ending August 15, 1941<sup>1 2</sup>

Group and industry	Establishments		Employees		Average percent- age change in wage rates of em- ployees having increases
	Total num- ber covered	Num- ber re- porting increases	Total number covered	Num- ber re- porting increases	
<b>All manufacturing</b> .....	33,701	885	7,029,475	290,249	7.3
Durable goods.....	12,793	406	4,139,876	160,343	7.4
Nondurable goods.....	20,908	479	3,489,599	129,906	7.2
<b>Iron and steel and their products, not including machinery</b> .....	2,572	59	1,104,765	16,980	9.9
Blast furnaces, steel works, and rolling mills.....	342	4	586,479	4,257	11.1
Bolts, nuts, washers, and rivets.....	66	4	19,191	-651	3.3
Cutlery (not including silver and plated cutlery) and edge tools.....	119	3	16,749	400	5.7
Forgings, iron and steel.....	99	3	20,190	452	7.5
Plumbers' supplies.....	110	3	20,042	1,041	12.3
Stamped and enameled ware.....	237	7	51,667	2,123	8.3
Steam and hot-water heating apparatus and steam fittings.....	109	4	44,933	1,205	8.6
Stoves.....	243	8	43,651	1,508	11.1
Structural and ornamental metalwork.....	293	5	36,038	238	7.9
Wirework.....	164	9	26,157	2,444	13.0
Screw-machine products.....	84	3	20,867	177	7.4
<b>Machinery, not including transportation equipment</b> .....	3,871	139	1,247,901	64,018	7.1
Agricultural implements (including tractors).....	110	15	70,733	29,396	5.3
Electrical machinery, apparatus, and supplies.....	590	12	343,425	1,983	8.1
Engines, turbines, water wheels, and windmills.....	70	3	92,445	15,777	10.0
Foundry and machine-shop products.....	2,272	75	405,819	9,883	8.0
Machine tools.....	205	10	97,463	2,253	5.4
Radios and phonographs.....	80	3	59,411	251	8.5
Textile machinery and parts.....	129	5	25,125	155	5.3
Machine-tool accessories.....	109	7	19,975	964	4.2
Refrigerators and refrigerating apparatus.....	51	5	36,979	3,210	7.8
<b>Transportation equipment</b> .....	844	30	906,044	39,319	8.9
Aircraft.....	108	9	220,375	15,214	8.9
Automobiles.....	403	7	396,679	10,240	5.6
Shipbuilding.....	219	11	215,695	12,842	11.4
<b>Nonferrous metals and their products</b> .....	1,083	55	255,527	20,974	4.8
Brass, bronze, and copper products.....	341	20	103,698	12,085	3.3
Jewelry.....	198	5	19,521	149	2.2
Lighting equipment.....	88	3	14,093	74	7.8
Sheet-metal work.....	131	5	8,194	231	8.9
<b>Lumber and allied products</b> .....	2,825	82	382,110	14,804	6.6
Furniture.....	717	32	118,149	8,519	6.9
Lumber:					
Millwork.....	580	14	45,230	2,218	6.3
Sawmills.....	751	22	145,068	2,621	5.0
Wooden boxes, other than cigar.....	140	3	14,691	305	3.5
<b>Stone, clay, and glass products</b> .....	1,598	41	243,529	4,348	6.9
Brick, tile, and terra cotta.....	530	13	50,517	885	6.9
Glass.....	153	3	74,701	336	7.8
Marble, granite, slate, and other products.....	244	3	5,924	48	6.3
Pottery.....	129	5	34,695	644	7.8
Glass products made from purchased glass.....	57	4	3,554	426	6.1
Wallboard and plaster, except gypsum.....	24	3	7,309	775	5.8
<b>Textiles and their products</b> .....	6,671	134	1,438,442	33,377	7.2
Fabrics.....	3,513	82	1,070,136	27,430	7.0
Cotton goods.....	824	4	450,480	1,660	10.4
Cotton smallwares.....	135	7	16,058	548	9.9
Dyeing and finishing textiles.....	231	4	59,539	657	11.6
Hats, fur-felt.....	49	6	8,163	3,274	5.9
Hosiery.....	325	3	101,429	760	9.3
Knitted outerwear.....	223	9	19,177	407	10.1
Silk and rayon goods.....	405	15	77,406	1,720	6.8
Woolen and worsted goods.....	415	19	170,405	11,332	6.9
Cordage and twine.....	61	3	13,146	756	7.9
Wearing apparel.....	3,158	52	368,306	5,947	8.4
Clothing, men's.....	1,215	14	158,471	1,686	10.3
Clothing, women's.....	1,184	22	99,495	984	11.5
Corsets and allied garments.....	64	3	12,242	231	8.6
Men's furnishings.....	153	4	15,273	270	6.9
Shirts and collars.....	278	5	59,210	1,969	6.7
Gloves and mittens, cloth or cloth and leather.....	40	4	7,817	807	5.4

See footnotes at end of table.

TABLE 7.—Wage-Rate Changes Reported by Manufacturing and Nonmanufacturing Establishments During Month Ending August 15, 1941<sup>1 2</sup>—Continued

Group and industry	Establishments		Employees		Average percent- age change in wage rates of em- ployees having increases
	Total num- ber covered	Num- ber re- porting increases	Total number covered	Num- ber re- porting increases	
<b>Leather and its manufactures</b> .....	1,084	52	257,190	20,699	5.7
Boots and shoes.....	512	30	180,233	17,487	5.5
Leather.....	176	11	39,065	2,769	6.2
Boot and shoe cut stock and findings.....	126	8	10,946	396	14.6
<b>Food and kindred products</b> .....	5,295	135	597,903	49,290	7.6
Baking.....	1,036	12	83,209	1,165	8.0
Beverages.....	314	5	6,273	243	4.9
Canning and preserving.....	1,009	11	183,596	1,862	13.1
Confectionery.....	280	6	38,941	1,994	7.6
Flour.....	331	17	15,103	1,676	7.3
Ice cream.....	283	4	12,214	113	5.3
Slaughtering and meat packing.....	334	33	121,356	36,989	7.3
Sugar, beet.....	78	29	5,652	1,702	6.9
<b>Paper and printing</b> .....	4,002	62	410,326	7,241	6.9
Boxes, paper.....	655	15	54,339	1,712	6.2
Paper and pulp.....	437	17	144,972	3,467	6.5
Printing and publishing:					
Book and job.....	1,604	17	84,430	656	6.5
Newspapers and periodicals.....	731	3	63,285	153	15.5
Paper goods, not elsewhere classified.....	148	4	22,885	217	9.2
Lithographing.....	79	3	8,206	514	10.3
<b>Chemical, petroleum, and coal products</b> .....	2,291	58	372,614	7,772	10.3
Chemicals.....	244	11	79,820	2,856	9.6
Druggists' preparations.....	96	5	15,929	249	10.0
Explosives.....	40	3	11,651	295	7.3
Fertilizers.....	311	7	11,395	199	14.6
Paints and varnishes.....	508	9	25,593	534	9.8
Soap.....	84	3	18,006	944	10.4
Compressed and liquefied gases.....	79	3	2,902	72	9.8
<b>Rubber products</b> .....	257	13	143,173	8,252	6.8
Rubber goods, other.....	202	10	53,313	4,262	6.6
<b>Miscellaneous</b> .....	1,078	25	197,284	3,275	7.4
Buttons.....	55	3	6,251	230	8.0
Sporting and athletic goods.....	41	4	8,565	616	7.2
<b>All nonmanufacturing (except building construction)</b> .....	<sup>3</sup> 94,810	301	3,038,400	32,052	7.1
Bituminous mining.....	<sup>3</sup> 1,050	30	242,100	4,503	14.4
Metalliferous mining.....	<sup>3</sup> 380	6	75,600	3,305	4.9
Quarrying and nonmetallic mining.....	<sup>3</sup> 1,090	13	40,700	450	12.2
Crude-petroleum production.....	<sup>3</sup> 480	5	34,500	928	5.6
Electric light and power.....	<sup>3</sup> 2,860	60	247,600	11,150	4.1
Manufactured gas.....	<sup>3</sup> 170	4	33,300	662	10.5
Street railways and busses.....	<sup>3</sup> 350	9	133,900	4,356	6.3
Wholesale trade.....	<sup>3</sup> 14,930	56	346,300	1,217	9.1
Retail trade.....	<sup>3</sup> 54,880	78	1,060,800	2,239	6.0
Hotels.....	<sup>3</sup> 1,950	12	147,600	2,091	8.9
Laundries.....	<sup>3</sup> 1,300	15	91,000	895	10.9
Brokerage.....	1,200	11	18,300	239	8.6

<sup>1</sup> Figures are not given for some industries to avoid disclosure of information concerning individual establishments. They are, however, included where practicable in "all manufacturing," and in the various industry groups.

<sup>2</sup> No decreases reported.

<sup>3</sup> Approximate—based on previous month's sample.

## UNEMPLOYMENT IN SEPTEMBER 1941

UNEMPLOYMENT declined from 5,300,000 in August to a new low of 4,500,000 in September. This decline of 800,000 in unemployment was accompanied by a decline of 1,500,000 in the labor force and a decline of 700,000 in total employment. These data are based on the WPA monthly unemployment survey.

TABLE 1.—*Estimated Civilian Labor Force, Employment, and Unemployment, by Months, April 1940–September 1941*

Month and year	Estimated number (millions of persons)			Month and year	Estimated number (millions of persons)		
	Labor force	Employed	Unemployed <sup>1</sup>		Labor force	Employed	Unemployed <sup>1</sup>
<i>1940</i>				<i>1941</i>			
April.....	53.9	45.1	8.8	January.....	52.8	45.2	7.6
May.....	54.7	46.3	8.4	February.....	52.7	45.5	7.2
June.....	56.3	47.7	8.6	March.....	52.4	45.6	6.8
July.....	57.0	47.7	9.3	April.....	53.3	46.7	6.6
August.....	56.7	47.8	8.9	May.....	54.0	48.3	5.7
September.....	55.2	48.1	7.1	June.....	55.7	49.8	5.9
October.....	54.8	47.4	7.4	July.....	56.0	50.4	5.6
November.....	53.9	46.3	7.6	August.....	55.8	50.5	5.3
December.....	53.2	46.1	7.1	September.....	54.3	49.8	4.5

<sup>1</sup> Includes persons on public emergency work projects.

The decline in employment is traceable entirely to the younger age group, in which employment was reduced by 1,300,000 as students abandoned temporary summer jobs to return to school. This decline was not unexpected. Between May and July, at the beginning of the summer-vacation period, there was an increase of 1,900,000 in employment in the younger age group. Most of these persons had returned to school by September, though some further withdrawals may be expected in the following month.

Employment in the two older age groups increased by a total of 600,000 between August and September, reflecting the rising general level of business activity and seasonal peaks in agriculture and agricultural-processing industries. The labor force in these age groups increased by 500,000, largely as a result of seasonal factors.

TABLE 2.—Estimated Civilian Labor Force, Employment, and Unemployment,<sup>1</sup> by Age Groups, August-September 1940 and August-September 1941

Age and labor market status	1941			1940			Increase or decrease, September 1940, to September 1941
	September	August	Increase or decrease	September	August	Increase or decrease	
Number (in millions)							
All age groups:							
Total labor force .....	54.3	55.8	-1.5	55.2	56.7	-1.5	-0.9
Employed .....	49.8	50.5	-0.7	48.1	47.8	+0.3	+1.7
Unemployed <sup>1</sup> .....	4.5	5.3	-0.8	7.1	8.9	-1.8	-2.6
Age 14-24 years: Labor force .....	12.0	14.0	-2.0	12.8	14.9	-2.1	-0.8
Employed .....	10.5	11.8	-1.3	10.2	11.1	-0.9	+0.3
Unemployed <sup>1</sup> .....	1.5	2.2	-0.7	2.6	3.8	-1.2	-1.1
Age 25-54 years: Labor force .....	33.4	33.1	+0.3	34.0	33.5	+0.5	-0.6
Employed .....	31.3	30.9	+0.4	30.6	29.6	+1.0	+0.7
Unemployed <sup>1</sup> .....	2.1	2.2	-0.1	3.4	3.9	-0.5	-1.3
Age 55 years and over: Labor force .....	8.9	8.7	+0.2	8.4	8.3	+0.1	+0.5
Employed .....	8.0	7.8	+0.2	7.3	7.1	+0.2	+0.7
Unemployed <sup>1</sup> .....	0.9	0.9	0	1.1	1.2	-0.1	-0.2
Unemployment rate <sup>2</sup> (percent)							
All age groups .....	8.3	9.5	-1.2	12.8	15.7	-2.9	-4.5
14-24 years .....	12.9	15.5	-2.6	20.7	25.7	-5.0	-7.8
25-54 years .....	6.3	6.8	-0.5	10.0	11.6	-1.6	-3.7
55 years and over .....	9.8	10.2	-0.4	12.6	14.7	-2.1	-2.8

<sup>1</sup> Excludes persons in institutions.<sup>2</sup> Includes persons on public emergency work projects.<sup>3</sup> Unemployed as a percent of labor force in each age group.



# Recent Publications of Labor Interest

NOVEMBER 1941

## Conciliation and Arbitration

*Compulsory settlement of labor disputes.* Washington, Library of Congress, Defense Service Section, 1941. 28 pp.; mimeographed. (Bull. No. 6—revision of No. 1.)

Covers the limited experience in the United States with compulsory settlement of labor disputes, and the experience of 9 foreign countries—Australia, Brazil, Canada, Denmark, France, Germany, Great Britain, New Zealand, and Norway.

*The Court of Arbitration in New Zealand—the evolution of a legislature.* By Wm. R. Tuck. (In *Economic Record*, Melbourne, Victoria, June 1941, pp. 46–56.)

## Consumer Problems

*Materials for consumer education—a selected bibliography.* Washington, U. S. Department of Agriculture, Consumers' Counsel Division, May 1941. 42 pp. (Consumers' Counsel series, No. 10.)

Includes material on such subjects as courses of study and other teaching aids, study guides for group discussion, the worker as a consumer, cooperative education, textbooks, motion pictures on consumer and cooperative subjects, radio broadcasts, exhibits and consumer playlets, and materials on the consumer movement.

*Producer to consumer: The job that distribution does for us.* New York, Twentieth Century Fund, [1941?]. 8 pp.

*Consumer credit—regulation W, as adopted August 21, 1941.* Washington, Board of Governors of Federal Reserve System, 1941. Various paging.

Gives text of the new 18-month regulation relating to installment purchases.

*Restriction of consumer credit.* By Charles E. Noyes. Washington, Editorial Research Reports, 1013 Thirteenth St. NW., 1941. 13 pp. (Vol. 2, 1941, No. 6.)

Deals briefly with proposals to curb installment selling; consumer credit in the depression; consumer credit in recovery and recession; and the present volume of installment and other credit.

*Risk elements in consumer installment financing (technical edition).* By David Durand. New York, National Bureau of Economic Research, 1941. 160 pp. (Studies in consumer installment financing, No. 8.)

Analysis of some of the factors involved in selecting credit risks and determining standards of credit in connection with the type of financing under review.

## Cost and Standards of Living

*Family expenditures for clothing, five regions.* By Day Monroe and others. Washington, U. S. Bureau of Home Economics, 1941. 387 pp., charts. (Consumer purchases study, farm series; Department of Agriculture miscellaneous publication No. 428.)

EDITOR'S NOTE.—The Bureau of Labor Statistics does not distribute the publications to which reference is made in this list, except those issued by the Bureau itself. For all others, please write to the respective publishing agencies mentioned.

*Life in one room: A study of the rooming-house problem in the Borough of Manhattan.* New York, Community Service Society, Committee on Housing, [1940]. Various paging; mimeographed.

Describes the types of rooming houses and their management, and existing public controls, and makes suggestions for additional action.

*Living and office-operating costs in Colombia.* Washington, U. S. Bureau of Foreign and Domestic Commerce, June 1941. 5 pp. (International reference service, Vol. 1, No. 29.)

This report gives general information concerning Colombia, and data on types and cost of living accommodations, and prices of food, clothing, and services, corresponding to the standard of living which foreign representatives of important American firms customarily maintain.

*The German food situation.* By Olive T. Kephart. Washington, U. S. Bureau of Labor Statistics, 1941. 10 pp. (Serial No. R. 1358, reprint from August 1941 Monthly Labor Review.)

### Economic and Social Problems

*Economic history of the United States.* By Chester W. Wright. New York and London, McGraw-Hill Book Co., Inc., 1941. 1120 pp., charts.

The author's approach to the study of economic history is described as that of the economist whose immediate and primary function is to study the production and distribution of wealth for the purpose of learning how the Nation's economic progress can be promoted and its standard of living advanced. Extensive use is made of statistics of income and of data relating to consumer expenditures. There are separate chapters on labor organizations, labor conditions, and the relation of Government to economic life during the main periods of American history.

*Federal administrative proceedings.* By Walter Gellhorn. Baltimore, Johns Hopkins Press, 1941. 150 pp.

The writer holds that administrative agencies have expanded not to satisfy an abstract theory but to cope with problems of recognized public concern. There are, however, critical discussions of several features of current administrative proceedings, including the administration of labor legislation.

*New forest frontiers for jobs, permanent communities, a stronger Nation.* Washington, U. S. Forest Service, 1941. 76 pp., charts, illus. (Department of Agriculture miscellaneous publication No. 414.)

Pictorial and graphic account of some of the problems of conserving the Nation's forest resources. It is stated that the situation calls for cooperation in many forms, for a considerable measure of public control, and for the acquisition by the community, the State, or the Federal Government of various problem areas.

*Leisure in the lives of our neighbors; Gladden Community House, Columbus, Ohio, 1938.* By Mary Louise Mark and Carl H. Bogart. Columbus, Ohio State University, School of Social Administration, 1941. 46 pp., maps, charts.

Report of an inquiry into social conditions in the area served by the Gladden Community House, covering occupations of the population, housing, rentals, use of leisure time, recreation facilities, and other matters.

*The psychology of the physically handicapped.* By Rudolph Pintner, Jon Eison, Mildred Stanton. New York, F. S. Crofts & Co., 1941. 391 pp.

Prepared as a textbook for the ever growing number of college and university courses dealing with psychology of the physically handicapped, and also for the use of persons already engaged in professional work in behalf of physically handicapped persons. A bibliography is given at the end of each chapter.

*Posibilidad económica del seguro social obrero en la Argentina.* By Eduardo A. Coghlan. (In Revista de Economía Argentina, Buenos Aires, July 1941, pp. 220-222.)

This article analyzes the economic position of the Argentine worker with respect to the need for and cost of workers' social insurance, showing the feasibility of such a scheme.

*Canada in peace and war: Eight studies in national trends since 1914.* Edited by Chester Martin. Issued under auspices of Canadian Institute of International Affairs. New York, etc., Oxford University Press, 1941. xix, 244 pp. An interpretation of some of the most significant trends in Canada in the last 25 years. One of the 8 studies deals with economic trends.

### Employment and Unemployment

*The effect of the defense program on unemployment.* Washington, U. S. Work Projects Administration, 1941. 32 pp.; mimeographed.

A study of the factors affecting expansion of output and the volume of employment. It is pointed out that the rate of output depends not on volume of appropriations but on the organization and direction of industry. The conclusion of the study is to the effect that after reasonable allowance is made for all stimulative and restrictive factors, in the light of present knowledge, total unemployment on the basis of current estimates and definitions will average from 5.5 to 7.5 millions between July 1941 and June 1942.

*The meaning of unemployment statistics.* By Aryness Joy. (In *Journal of American Statistical Association*, Washington, June 1941, pp. 167-174.)

The author describes the sources and limitations of data used for making estimates of unemployment. These estimates have depended on estimates on the one hand of the labor supply or labor force and on the other hand of numbers of workers employed. It is stated that errors in the unemployment statistics may amount to as much as 50 percent. The importance of knowing promptly the approximate amount of unemployment is emphasized and a proposal is made to develop a system of monthly sampling, using the Census of 1940 as a bench mark and following its general definitions. This proposal is in accord with the development of unemployment sampling by the Work Projects Administration.

*Some aspects of employment discrimination—an American problem.* Annual report of Bureau on Employment Problems, Cleveland, Ohio, year 1940. Cleveland, [1941]. 16 pp.; mimeographed.

According to this report, employment discrimination is inescapably related to the fundamental problem of the ability of industry and business to absorb all employables.

### Employment Services

*Finding men for defense jobs: How the United States Employment Service is meeting today's needs.* By Collis Stocking, U. S. Bureau of Employment Security. (In *Dun's Review*, New York, July 1941, pp. 5-10, et seq.; chart, illus.)

*Placement services in colleges and universities.* By Lulu B. Anderson. Washington, U. S. Office of Education, 1941. 39 pp., bibliography. (Bulletin, 1940, No. 12.)

The placement procedures reported in this sample study are those of representative higher educational institutions of different types in various parts of the country.

*Twenty-ninth annual report of Milwaukee Citizens Committee on Unemployment and Milwaukee office of Wisconsin State Employment Service, for fiscal year July 1, 1940-June 30, 1941.* Milwaukee, 1941. 19 pp.

The report shows the total number of placements made during the year and the number of applicants, and the number placed in the special service divisions.

### Health and Industrial Hygiene

*Occupational hazards in the aircraft industry [Canada].* Ottawa, Department of Pensions and National Health, 1941. 6 pp.; mimeographed.

*Skin hazards in airplane manufacture.* By Louis Schwartz and John P. Russell. (In *Public Health Reports*, U. S. Public Health Service, Washington, August 8, 1941, pp. 1581-1593; illus.)

This investigation covered 9 airplane factories employing over 100,000 workers. Many skin hazards were found, the principal ones being those from cutting oils,



thinners, and solvents used in paints and "dopes," plating and rustproofing of metals, fluxes used in welding, and solvents used for cleaning and degreasing. Preventive measures described include the wearing of impervious clothing and use of protective ointments and nonirritating skin cleansers, in addition to proper general and local ventilation.

*The health of brick and tile plant workers in North Carolina.* By M. F. Trice. [Raleigh, Division of Industrial Hygiene of North Carolina State Board of Health and North Carolina Industrial Commission?], 1940. 15 pp., map; mimeographed.

The study, covering a large proportion of the brick and tile workers of the State, did not show any silicosis or other serious pulmonary disease among these workers,

*The health and efficiency of munition workers.* By H. M. Vernon. London. Oxford University Press, 1940. 138 pp., diagrams.

The findings of the British Health of Munition Workers Committee in the last war, together with the results of various researches in intervening years, are reviewed in relation to problems connected with present conditions. Some of the serious errors formerly committed and the steps taken to correct them are described, as well as the many advances in the methods of improving industrial health and efficiency in the past 20 years. It is pointed out that such methods ought to be applied and extended as fully as possible to all industrial workers if Great Britain is to reach its highest level of attainment.

*The occurrence and prevention of occupational diseases among women, 1935 to 1938.* By Margaret T. Mettert. Washington, U. S. Women's Bureau, 1941. 46 pp., charts, illus. (Bull. No. 184.)

The bulletin summarizes reports from nine States regarding the number of women injured by occupational diseases and special reports as to hazards in specific industries.

*Carbon monoxide, its toxicity and potential dangers.* By Division of Industrial Hygiene, National Institute of Health. (In Public Health Reports, U. S. Public Health Service, Washington, March 7, 1941, pp. 421-433; also in reprint No. 2242.)

*Hydrogen sulfide, its toxicity and potential dangers.* By Division of Industrial Hygiene, National Institute of Health. (In Public Health Reports, U. S. Public Health Service, Washington, April 4, 1941, pp. 684-692; also in reprint No. 2256.)

*Responsibility of nursing profession in industrial hygiene.* By J. J. Bloomfield. (In Public Health Reports, U. S. Public Health Service, Washington, May 30, 1941, pp. 1131-1141.)

The writer defines some of the problems of industrial hygiene and shows to what extent these are now being met on the part of both industry and various health agencies. The important role which the public-health nurse plays in the entire program of maintaining health is discussed from the viewpoint of the nurse in industry, in official agencies, and in nonofficial organizations.

*Medical care in New York State, 1939.* Report of New York State Temporary Legislative Commission to Formulate a Long-Range State Health Program, transmitted March 28, 1940. Albany, 1940. 492 pp., maps, charts. (Legislative document, 1940, No. 91.)

In addition to the report on the status of medical care in New York State in 1939, which comprises the major portion of the volume, there are summaries of a number of studies of special phases of the problem of medical care, as well as a summary of progress made along the lines of the health commission's recommendations.

*Morbidity trends and trade cycles.* By Laura E. Bodmer. (In International Labor Review, Montreal, Canada, May 1941, pp. 514-541.)

The theory that recorded sickness diminishes during trade depressions and rises in periods of trade expansions is discussed from the standpoint of statistics of sickness experience in Scotland and of sickness experience and wages in France, Czechoslovakia, and Germany.



### *Industrial Accidents and Workmen's Compensation*

*Coal-mine accidents in the United States, 1938.* By W. W. Adams, L. E. Geyer, M. G. Perry. Washington, U. S. Bureau of Mines, 1941. 127 pp. (Bull. 437.)

The death rate from accidents in coal mines in 1938, per million man-hours of exposure or employment, was 2.2 percent higher than in 1937, but the injury rate decreased 1.8 percent. There was a decrease in actual numbers of fatal and nonfatal injuries of 21.8 and 24.8 percent, respectively; the number of employees, however, declined 8.2 percent and total man-hours of employment 23.4 percent.

*Quarry accidents in the United States during calendar year 1939.* By W. W. Adams and Virginia E. Wrenn. Washington, U. S. Bureau of Mines, 1941. 76 pp., chart. (Bull. 438.)

Lower accident rates in 1939 than in 1938 were reported by 16 of 26 States in each of which quarrying and related industries employed 1,000 or more men. Eight of the 26 States had no fatal accidents in these industries during 1939, Michigan leading with the largest number of man-hours worked without a fatality. Michigan also had the lowest frequency rate for nonfatal injuries. For the 18 States in which fatal accidents occurred during 1939, the fatality rate was 0.33 per million man-hours of employment; for the 26 States taken together the injury rate was 36.18.

*Olycksfall i arbete år 1938.* Stockholm, Riksförsäkringsanstalten, 1941. 54 pp.

Annual report on industrial accidents and diseases in Sweden in 1938. Printed in Swedish with résumé in French, and table of contents and certain other equivalents in French.

*Net profit and industrial safety.* By H. W. Heinrich. (In Industrial Safety Survey, International Labor Office, Montreal, Canada, January-March 1941, pp. 1-14.)

The writer sought to show the relation of accident prevention to production and to evaluate it in monetary terms, and also to show the responsibility as well as the opportunity of management to prevent accidents.

*Signs—effective tools for accident prevention.* By Cyril Ainsworth. (In Industrial Safety Survey, International Labor Office, Montreal, Canada, April-June 1941, pp. 41-46; illus.)

*Industrial accident report [New Jersey]: Compensable cases closed during year ending December 31, 1940.* Trenton, Department of Labor, Bureau of Statistics and Records, [1941]. 19 pp.; mimeographed.

There were 25,585 compensable industrial accident cases closed in New Jersey in 1940, according to this report, for which compensation amounting to \$6,759,049 was awarded. The major portion of this sum (\$5,493,675) was paid in connection with 10,149 cases of permanent partial disability; a total of \$285,184 was awarded for 275 cases of death (250) or permanent total disability. Working days lost through the 25,585 compensable accidents numbered 5,666,485, death or permanent total disability accounting for 1,644,000 days and permanent partial disability for 3,469,486.

*Diseases of occupations and other nonaccidental injury cases settled in 1940 [under Wisconsin Workmen's Compensation Act].* Madison, Industrial Commission, 1941. 32 pp.; mimeographed. (Statistical release No. 3042.)

Compensable injury cases settled under the Workmen's Compensation Act of Wisconsin in 1940 totaled 19,949, of which 19,275 were industrial-accident cases and only 674 arose from occupational diseases or other nonaccidental causes.

*Workmen's compensation in Canada—a comparison of provincial laws.* Ottawa, Department of Labor, July 1941. 27 pp.; mimeographed.

*Workmen's compensation.* By W. H. Thompson. London, Frederick Muller, Ltd., 1941. 48 pp.

Explanation of new British workmen's compensation law and text of law.

### *Industrial Relations*

*Addresses on industrial relations, 1941.* Ann Arbor, University of Michigan, Bureau of Industrial Relations, 1941. 93 pp.; mimeographed. (Bull. No. 13.)

Summaries of addresses delivered at annual conference on industrial relations at University of Michigan, held in April 1941.

*Report of seventh annual midwest conference on industrial relations, November 15, 1940, at University of Chicago, conducted by Industrial Relations Association of Chicago and School of Business, University of Chicago.* Chicago, Industrial Relations Association of Chicago, [1941?]. 60 pp.; mimeographed.

*Six years of the National Labor Relations Act.* By H. A. Millis, chairman. (In Labor Information Bulletin, U. S. Bureau of Labor Statistics, Washington, August 1941, pp. 1-4.)

*Fourth annual report of New York State Labor Relations Board, for year ended December 31, 1940.* New York, 1941. 130 pp.

*The great bus strike.* By Leo Huberman. New York, Modern Age Books, Inc., 1941. 167 pp., illus.

A day to day account of the strike of New York City bus drivers in the spring of 1941, from the union's point of view.

*The New York City Transit System: Public ownership, civil service, and collective bargaining.* By Arthur W. Maemahon. (In Political Science Quarterly, New York, June 1941, pp. 161-198.)

The taking over and unification of the Rapid Transit System by the public authorities in New York City gave rise to a controversy between the city and organized labor which has national interest and significance. The author discusses the background of the controversy and describes the administrative structure of the city-owned system, the civil service, collective bargaining, and other problems of labor under public ownership.

*Labor peace in Pacific ports.* By Paul Eliel. (In Harvard Business Review, Vol. 19, No. 4, summer number, New York, 1941, pp. 429-437.)

Objective account of the longshore labor situation on the west coast by one who has taken an active part in settling the numerous controversies which have occurred during the past 7 years.

*To whom may aggrieved teachers appeal?* Washington, National Education Association of the United States, Committee on Tenure, 1941. 45 pp.

Based on State statutes and court decisions, this pamphlet was prepared to acquaint teachers and other school employees with the channels through which they may make appeals against orders or actions of local school authorities.

### Industry Reports

*Bituminous coal.* Washington, U. S. Bureau of Mines, 1941. 60 pp., charts. (Reprint from Minerals Yearbook, review of 1940.)

Statistics of production, mechanization, employment, and related information.

*Wage and price structure of bituminous-coal industry.* By Witt Bowden. Washington, U. S. Bureau of Labor Statistics, 1941. 21 pp. (Serial No. R. 1351, reprint from August 1941 Monthly Labor Review.)

*Black land: The way of life in the coal fields.* By George Korson. Evanston, Ill., Row, Peterson and Co., 1941. 72 pp., illus.

A volume in "The way of life" series. The conditions and problems in coal mining are described in the form of stories.

*The Douglas fir industry.* An interdepartmental study conducted under the direction of Dexter M. Keezer. Washington, Advisory Commission to U. S. Council of National Defense, Bureau of Research and Statistics, March 1941. 98 pp., charts; processed.

This investigation was undertaken as a result of wage disputes and for the purpose of contributing to the stabilization of wage and employment conditions in the industry. Extensive use was made of the information in the wage negotiations of 1941 in the Douglas fir industry. The subjects covered in the report include production, employment, pay rolls, wages and other costs, prices, and labor productivity.

*New England's fishing industry.* By Edward A. Ackerman. Chicago, University of Chicago Press, 1941. 303 pp., maps, charts, illus.

Deals with the geographical, technical, and commercial phases of New England fisheries, with a final chapter on social aspects. There are references to what is described as the disadvantage of the comparatively high wages paid in the New England fisheries, but there is no analysis either of comparative wages or of comparative labor costs per unit of output. A brief bibliography is appended to each of the 9 chapters but the last.

*Men's and women's garment industry in New York City.* By Lenore Sivin. New York, Department of Investigation of New York City, [1941?]. 70 pp.; mimeographed. (Studies in municipal problems, No. 6.)

The two divisions of the industry are treated separately, and the opinions expressed are those of the author and not the State publishing agency.

*The American maritime industries and public policy, 1789-1914—an economic history.* By John G. B. Hutchins. Cambridge, Harvard University Press, 1941. 627 pp.; bibliography. (Harvard economic studies, vol. 71.)

A study awarded the David A. Wells prize for 1939-40. The author's aim was to bring together "into an integrated whole" the various elements of the history of shipbuilding and shipping and the effects of public policies on these industries. He emphasizes business organization, changing techniques, and public policies, and gives comparatively little attention to wages, working conditions, unionism, and other topics having a primary labor interest.

*Compensation, service, and age of railroad employees, 1939—statistical tables; Compensation and service of class I railroad employees, 1939—statistical tables by occupation.* Washington, U. S. Railroad Retirement Board, May and July 1941. 2 vols.; processed.

These tables are of general interest in giving information relating to the range of compensation and of employment. The first volume contains tables showing number of employees distributed by amount of credited compensation in 1939 and number of months of service for that year. Eight of these tables are by class of employer (class I railroads, railway express agency, etc.); 15 give data for class I railroads under major occupational groups; and 42 give data for the larger individual occupations. This volume also contains tables showing the number of employees distributed by age groups and by number of months of service in 1939. The second volume gives similar data for the employees of class I railroads by separate occupations.

*Census of business, 1939: Retail trade—monthly employment, sex of employees.* Washington, U. S. Bureau of the Census, 1941. 236 pp. (Sixteenth Census of the United States, 1940.)

### Old-Age Assistance

*Annual report of Division of Old Age Assistance, New Jersey Department of Institutions and Agencies, for period July 1, 1939, to June 30, 1940.* Trenton, [1941?]. 28 pp., charts.

*First annual report of retirement system of Tennessee Valley Authority, November 1, 1939-June 30, 1940.* Knoxville, U. S. Tennessee Valley Authority, 1941. 15 pp.; mimeographed.

This report covers 8 months' operation as an independent system. At the end of that time (as of June 30, 1940), there were 5,786 members in the system. Only 2 persons had been retired—both for disability.

*Merit and retirement systems for Vermont.* Report of a special commission authorized by No. 244 of the Acts of 1939. Montpelier, Commission on Personnel Administration, 1940. 51 pp.

Report recommends (1) enactment of a bill (the text of a recommended measure is given) establishing a merit, or civil-service, system for State employees; and (2) passage of legislation authorizing the Emergency Board to adopt "a State retirement system by making contract with some reliable insurance company or association" and giving the Governor authority and funds "to meet the terms of any amendment to the social security act providing coverage of all municipal employees."

*Year book of Board of Pensions of Methodist Church (incorporated in Illinois), 1941.* Chicago, Methodist Publishing House, 1941. 109 pp.

In addition to statistics covering the pension system of the Methodist Church, data are given on pension systems of other denominations.

### Personnel Management

*Personnel management—principles, practices, and point of view.* By Walter Dill Scott and others. New York, McGraw Hill Book Co., Inc., 1941. xii, 589 pp., bibliography, charts. 3d ed.

There has been a shifting of emphasis in industrial relations during the past 10 years with a whole series of legislation. The revised edition of this book, accord-



ingly, includes the social and labor legislation, management's attempt to adjust its practices and policies to the new requirements, and the new practices and procedures that have evolved aside from those to meet the new legal relationships. As a means of checking the revision against current procedures, 231 companies were surveyed as to the status of personnel management.

*Employment tests for industrial workers—a selected, annotated bibliography (preliminary draft).* Princeton, N. J., Princeton University, Industrial Relations Section, August 1941. 17 pp.; mimeographed.

*How to interview.* By Walter V. Bingham and Bruce V. Moore. New York, Harper & Bros., 1941. 263 pp. 3d rev. ed.

The revised volume contains, in addition to the latest findings of research in this field, fresh material on vocational counseling, interviewing of students, workers, etc., and interviewing techniques and procedures in many fields related to social and personnel work.

*How to make a morale survey—a manual of procedures.* By Eugene J. Benge. New York, National Foremen's Institute, Inc., 1941. 64 pp., bibliography, charts, illus.

The value of testing employee attitudes and the methods of making such a study, methods of analyzing the results, and the practical application of the findings toward improving the morale of the employees surveyed are discussed. A section is devoted to a digest of articles on employee-attitude studies.

## Planning

*Planning for America.* By George B. Galloway and associates. New York, Henry Holt and Co., 1941. 713 pp., bibliography.

A comprehensive survey of planning in its major aspects. The contributors to the volume accepted in general certain assumptions as defined by the editor, these assumptions taking for granted a much greater degree of planning and democratic coordination of national and world economy than has heretofore existed. Chapters bearing most directly on labor's interest in planning include discussions of technology and planning, employment planning, income distribution and consumption, the relation of fiscal policy and investment to employment, public works planning, housing, health, recreation, social security, and, in the concluding section, a discussion of employment and economic progress.

*Long-range programming of municipal public works.* Washington, U. S. National Resources Planning Board, 1941. 72 pp., bibliography.

Discusses purposes and methods of programming public improvements. Procedures described are those developed on demonstration projects in 1939 and 1940.

*Proceedings of National Conference on Planning, held at Philadelphia, Pa., May 12-14, 1941.* Chicago, American Society of Planning Officials, 1941. 357 pp. Subjects considered included housing and industrial production.

## Priorities

*Labor problems resulting from defense priorities.* By Robert R. R. Brooks. (In Labor Information Bulletin, U. S. Bureau of Labor Statistics, Washington, September 1941, pp. 1-4.)

*Priority control.* By Stella Stewart. Washington, U. S. Bureau of Labor Statistics, 1941. 20 pp.; mimeographed.

## Relief Measures and Statistics

*The administration of Federal work relief.* By Arthur W. Macmahon, John D. Millett, Gladys Ogden. Chicago, Public Administration Service, 1941. 407 pp. (Social Science Research Council studies in administration, Vol. XII.)

*Social data on recipients of public assistance accepted in 1939-1940: Part 1, Old-age assistance—tables; Part 2, Aid to dependent children—tables; Part 3, Aid to the blind—tables.* Washington, U. S. Social Security Board, Bureau of Public Assistance, 1941. Various paging. (Research memorandum No. 1.)



*The Farm Security Administration, United States Department of Agriculture.* Washington, U. S. Farm Security Administration, 1941. 40 pp., illus.

Describes the work of the Farm Security Administration in helping needy farm families escape from the relief rolls and become self-supporting.

*Rural public welfare—selected records, with introductory notes and comments.* By Grace A. Browning. Chicago, University of Chicago Press, 1941. 578 pp., bibliography.

For the most part the records here presented reflect differences in case situations or treatment procedures arising from the rural character of the environment. The volume is divided into three parts dealing, respectively, with government and public welfare in the rural community; worker, client, and community; and rural social resources. The references in the selected bibliography are also grouped under these three main heads.

*Federal aid and public assistance in Illinois.* By Arthur P. Miles. Chicago, University of Chicago Press, 1941. 259 pp. (Social service monograph, [No. 54].)

The development of Federal assistance to States for unemployment relief and public assistance are discussed from the standpoint of the administration of federally aided social services in Illinois.

*A report of four years' public welfare administration in Indiana, 1936-1940.* Indianapolis, Department of Public Welfare, Division of Supervision of State Institutions, [1941?]. 375 pp., charts, illus.

Covers old-age assistance, homes for aged, aid to dependent children and to blind, etc., as well as the various State institutions.

*Out-patient care for the needy.* Chicago, American Hospital Association and American Public Welfare Association, Joint Committee on Hospital Care, [1940?]. 16 pp.

Statement of policies and principles concerning payment from tax funds to nongovernmental institutions for out-patient service.

### Sickness Insurance

*Compulsory health insurance?* (In *The Commonwealth*, San Francisco, Calif., May 27, 1941, pp. 423-470; *Transactions of Commonwealth Club of California*, Vol. XXXV, No. 9.)

This is the ninth report presented by the Commonwealth Club of California to the State Commission on Social Insurance. It contains the minority report favoring and the majority report opposing compulsory health insurance, pro and con arguments, and discussion by members of the club.

*But health insurance is different.* By Nathan Sinai. (In *Harper's Magazine*, New York, August 1941, pp. 275-282.)

The writer discusses the many complexities connected with the provision of health insurance as compared with other forms of insurance for which there is a better actuarial basis, the discussion being founded largely on the experience of existing health-insurance and hospital-insurance plans.

*National Health Insurance Fund accounts [Great Britain] for year ended December 31, 1939.* London, Exchequer and Audit Department, 1941. 30 pp.

The report gives the receipts and expenditures of the English, Welsh, and Scottish health insurance funds in 1939.

### Social Security

*Social security in the United States, 1941.* A record of the fourteenth national conference on social security, New York City, April 4 and 5, 1941, together with a census of social security in the United States. New York, American Association for Social Security, Inc., 1941. 187 pp.

In addition to consideration of different phases of the social-security system, a session of the conference was devoted to medical care, in which papers were presented on voluntary group-health programs and on the Farm Security Administration's medical program for farm families.

*Functions of the Federal Security Agency.* Washington, U. S. Federal Security Agency, 1941. 29 pp.

The various divisions of the Federal Security Agency whose work is described in this pamphlet include the Civilian Conservation Corps, National Youth Administration, Office of Education, Public Health Service, and Social Security Board.

*The community welfare picture as reflected in health and welfare statistics in 34 urban areas, 1940: A summary of expenditures for health and welfare activities and of reports of cases dealt with in the fields of relief and child care.* Washington, U. S. Children's Bureau, 1941. Various paging, charts; processed.

*Danmarks sociale lovgivning, 1891-1941.* Copenhagen, Socialt Tidsskrift, 1941. 416 pp., maps, plans, charts, illus.

This volume analyzes Danish social legislation and gives information on its administration and operation. Among the measures discussed are those dealing with sickness, accident, invalidity, old-age, and unemployment insurance; public assistance, including hospitalization and medical treatment; housing; and vocational training.

*Social insurance in Latin America, its state and standards.* By Maurice Stack. (In *International Labor Review*, Montreal, Canada, July 1941, pp. 1-29.)

A brief summary account of conditions bearing on the standard of living of the workers in Latin America is followed by a discussion of workmen's compensation; retirement, invalidity, and survivors' pensions; and sickness and maternity insurance.

*Informe que presenta el gerente de la Caja del Seguro de Empleados Privados y Obreros al Consejo de Administración, acerca de las labores desarrolladas en el ultimo trimestre de 1939 y durante el año 1940 [Ecuador].* Quito, Caja del Seguro de Empleados Privados y Obreros, 1941. 53 pp.

This report, by the Manager of the Insurance Fund of Private Employees and Workers of Ecuador, gives the number of enterprises and of members paying social-insurance contributions in 1940, by provinces; receipts of the Fund by years, 1938, 1939, and 1940, by source; expenditures in the same years, including those for sickness, unemployment, invalidity, and death; and housing-construction projects for members, completed or in progress.

*Cuarta memoria de la Caja Nacional de Seguro Social, correspondiente al año 1940 [Peru].* Lima, [1941]. 39 pp., pasters.

Fourth annual report of the Peruvian National Social Insurance Fund summarizing the work of the Fund to December 31, 1940, including registration of persons covered by the scheme, collection of employer contributions, and other routine activities.

*Riksförsäkringsanstalten år 1939.* Stockholm, Riksförsäkringsanstalten, 1941. 24 pp.

A short review of the activities of the social-insurance institutions in Sweden in 1939, including statistics of the benefits granted and other financial transactions.

## Wages and Hours of Labor

*Earnings and hours in furniture industry, February 1941.* By Victor S. Baril. Washington, U. S. Bureau of Labor Statistics, 1941. 39 pp. (Serial No. R. 1330.)

Extracts from this report were published in the September 1941 *Monthly Labor Review* (p. 741.).

*Newspaper minimum wage scales, hours, and working conditions of subordinate unions of the International Printing Pressmen and Assistants' Union of North America, September 15, 1941.* Pressmen's Home, Tenn., International Printing Pressmen and Assistants' Union, 1941. 57 pp.

*Earnings and hours in rayon and silk industry, 1940.* By Louis M. Solomon. Washington, U. S. Bureau of Labor Statistics, 1941. 20 pp. (Serial No. R. 1357, reprint from August 1941 *Monthly Labor Review*.)

*Report of national salary survey of National Office Management Association, 1940-41.*

A study by the National Research Committee [of the Association], summarized by E. H. Conarroe, chairman. Philadelphia, National Office Management Association, 1941. 8 pp.

Summary data are presented showing, by sex of worker, average monthly rates of pay in 17 office positions in 24 cities, selected from many sections of the country.

*Time rates of wages and hours of labor in Massachusetts, 1940.* Boston, Department of Labor and Industries, 1941. 111 pp. (Labor bull. No. 183; public document No. 15.)

*Farm wage boards.* Berkeley, University of California, Bureau of Public Administration, 1941. 26 pp., chart; mimeographed. (1941 legislative problems, No. 8.)

One of the series on legislative problems prepared at the request of California legislators. It is pointed out that with few exceptions agricultural labor has been specifically excluded from the operation of State and Federal wage legislation. The obstacles in the way of collective bargaining between hired farm workers and their employers are also mentioned. Arguments are outlined, both against the inclusion of hired farm workers in labor legislation and in favor of their inclusion. The study suggests the possibilities of special adaptations of legislative policy in the light of experience with farm-wage boards. The limited experience with such boards in the United States (mainly in California) is described and experience in other countries, particularly in England, is analyzed. There is also an account of minimum-wage determination by the Federal Government in the sugar-beet industry.

### Wartime Conditions and Policies

*America prepares for tomorrow: The story of our total defense effort.* By William Dow Boutwell and others. New York, Harper & Brothers, 1941. 612 pp., bibliography.

A description of the national-defense organization and of defense activities, with an appendix containing selected documents relating to defense, as for example, the text of the executive order establishing the National Defense Mediation Board. There are chapters on workers in defense industries, training of workers, and women in national defense.

*Defense planning and labor policy.* Washington, National Planning Association, 1941. 24 pp. (Planning pamphlet No. 5.)

*The effective use of existing industrial capacity.* By Stella Stewart. Washington, U. S. Bureau of Labor Statistics, 1941. Various paging; mimeographed.

Deals briefly with the program developed by the War Industries Board during 1917-18 for determining the adaptability to direct war work of industrial plants scattered throughout the country. This work was made more effective through the use of regional offices with headquarters offices located in important areas.

*Wartime labor problems and policies in Canada.* By Bryce M. Stewart. (In Canadian Journal of Economics and Political Science, Vol. 7, No. 3, Ottawa, August 1941, pp. 426-446; also reprinted.)

The outstanding factors affecting the war labor policy of Canada are, in the author's opinion, the division of authority between the Dominion and the Provinces, the divergent interests of the departments of the Government, and the diverse interests of employers and employees.

*Social and political changes in wartime Britain.* By James Frederick Green. (In Foreign Policy Reports, New York, August 15, 1941, pp. 138-148.)

Describes the emergency measures adopted, the leveling processes that are occurring, and the democratic system in operation.

*Summary report by Department of Health for Scotland for period from January 1, 1939, to June 30, 1941.* Edinburgh, 1941. 23 pp. (Cmd. 6308.)

The report reviews briefly the emergency welfare services set up because of the war, including rest centers, provision of information and assistance, billeting, methods of handling evacuation, and air raid shelters; casualty services; and health and social services.



## Youth Problems

*Activities of National Youth Administration, 1935-40.* Washington, U. S. Bureau of Labor Statistics, 1941. 10 pp. (Serial No. R. 1315, reprint from May 1941 Monthly Labor Review.)

*Employment opportunities for youth in Boston retail stores.* By Joseph M. O'Leary. Washington, U. S. Bureau of Labor Statistics, 1941. 13 pp. (Serial No. R. 1352, reprint from August 1941 Monthly Labor Review.)

*Building rural communities: Proceedings of twenty-third American country life conference, Lafayette, Ind., November 6-9, 1940.* Chicago, University of Chicago Press (for American Country Life Association, New York), 1941. 171 pp.

The proceedings included discussions of the needs of rural youth.

*Negro youth in a cotton-peanut county—Southampton County, Virginia.* By Stanford J. Harris. Blacksburg, Va., Virginia Polytechnic Institute, Virginia Agricultural Experiment Station, 1940. 28 pp., maps, charts. (Virginia rural youth survey report No. 3; Rural sociology report No. 15.)

One of a series of studies of Negro youth adjustments in a number of areas. Occupations, income, and employment are among the subjects on which information is given in this report. According to the 1930 Census, 61 percent of the population in Southampton County are Negroes.

*Time on their hands: A report on leisure, recreation, and young people.* Prepared for American Youth Commission by C. Gilbert Wrenn and D. L. Harley. Washington, American Council on Education, 1941. xxi, 266 pp., illus.

Examines the needs of youth in the light of the new meaning of recreation, resulting from technological developments, the growth of commercial recreation, the accessibility of urban amusements to rural youth, and the prolongation of economic dependency of youth. Selected reading lists are included.

*Work camps for college students.* Prepared for American Youth Commission by Kenneth Holland. Washington, American Council on Education, 1941. 32 pp., illus.

The objective of this survey was to ascertain what values of the work-camp movement might be included in the framework of general education.

*Work camps for high school youth.* Prepared for American Youth Commission by Kenneth Holland and George L. Bickel. Washington, American Council on Education, 1941. 27 pp., illus.

These work camps are experiments in giving to boys and girls, who do not know how to do any type of work except that of the classroom, an opportunity to learn something about manual labor done in a group for the benefit of others.

## General Reports

*Canada 1941: The official handbook of present conditions and recent progress.* Ottawa, Dominion Bureau of Statistics, 1941. 186 pp., illus.

The final chapter of this volume contains information on labor legislation, the gainfully occupied, wages and hours of labor, organized labor, industrial disputes, employment and unemployment, unemployment assistance, relief, and old-age pensions.

*Labor trends and social welfare in Latin America, 1939-1940.* Washington, Pan American Union, Division of Labor and Social Information, June 1941. 69 pp.; mimeographed.

Nontechnical account of events and movements in Latin American Republics, except Honduras and Panama, in 1939 and 1940, bearing on the welfare of the working people, covering such topics as cost of living, minimum wage, cooperatives, labor organizations, housing for workers, etc.

*Latin American journals dealing with the social sciences and auxiliary disciplines.* Washington, Pan American Union, Division of Intellectual Cooperation, 1941. 74 pp.; mimeographed.

Annotated directory of 192 Latin American journals dealing with the social sciences and allied subjects, of which 10 are listed as dealing with labor or having sections devoted to labor.



*Informes sobre las principales estadísticas Mexicanas.* México, D. F., Dirección General de Estadística, Secretaría de la Economía Nacional, 1941. 174 pp.

A history of government statistical work in Mexico, by subject, and an account of present procedure in collection of data and classification of results. Occupations, housing, organizations of workers and employers, unemployment, minimum wage, industrial accidents, occupational diseases, labor disputes, collective farming, prices and price indexes, wages, and cost of living, are among the topics included.

*Twenty-first report from Select Committee on National Expenditures, [Great Britain, Parliament, House of Commons], session 1940-1941.* London, 1941. 20 pp.

Deals with the use of labor and the best methods of obtaining maximum output while protecting the health of workers.

*Årsberetninger fra Arbeidsrådet og Arbeidstilsynet, 1940.* Oslo, Arbeidstilsynet, [1941]. 148 pp., charts, illus.

Annual report on activities of the State Labor Council and the labor inspectors in Norway in 1940, including information on pertinent legislation enacted in 1940, and on industrial accidents and diseases and measures for their prevention.

Printed in Swedish with French translation of table of contents and a résumé in French.

*Soviet-Russian economics.* Edited by S. N. Prokopovicz. (In *Annals of Collective Economy*, Vol. XVI, Geneva, May-September 1941, pp. 277-312.)

This article contains a general review of the reorganization of working conditions in Soviet industries, trades, and agriculture during 1938-41, including information on procurement of agricultural products by the Soviet State, results of the population census of 1939, and a short review of the sovietization of the Baltic States, Western Ukraine, White Russia, Bessarabia, and Northern Bukovina, annexed by Soviet Russia in 1939-40.

The data on which the review is based are from original Soviet sources.

*Statistisk årsbok för Sverige, 1941.* Stockholm, Statistiska Centralbyrån, 1941. 412 pp.

General statistical yearbook on social, economic, and political conditions and developments in Sweden, including data on prices and cost of living, cooperatives, housing, employment, unemployment, employment service, industrial disputes, collective agreements, wages and salaries, and public assistance.

Printed in Swedish with table of contents, table heads, and certain other equivalents in French.